EN

DE

FR

ES

IT

SE

CDA-7878R

FM/MW/LW/RDS CD Receiver

- OWNER'S MANUAL
  Please read before using this equipment.
- BEDIENUNGSANLEITUNG
  Lesen Sie diese Bedienungsanleitung bitte vor Gebrauch des Gerätes.
- MODE D'EMPLOI
  Veuillez lire avant d'utiliser cet appareil.
- MANUAL DE OPERACIÓN
  Léalo antes de utilizar este equipo.
- ISTRUZIONI PER L'USO
  Si prega di leggere prima di utilizzare il attrezzatura.
- ANVÄNDARHANDLEDNING
  Innan du använder utrustningen bör du läsa igenom denna användarhandledning.

MP3 DHE

ALPINE ELECTRONICS, INC.
Tokyo office: 1-1-8 Nishi Gotanda,
Shinagawa-ku,
Tokyo 141-8501, Japan
Tel.: (03) 3494-1101

ALPINE ELECTRONICS OF AMERICA, INC.
19145 Gramercy Place, Torrance,
California 90501, U.S.A.
Tel.: 1-800-ALPINE-1 (1-800-257-4631)

ALPINE ELECTRONICS OF CANADA, INC.
Suite 203, 7300 Warden Ave. Markham,
Ontario L3R 9Z6, Canada
Tel.: 1-800-ALPINE-1 (1-800-257-4631)

ALPINE ELECTRONICS OF AUSTRALIA PTY. LTD.
6-8 Fiveways Boulevarde Keysborough,
Victoria 3173, Australia
Tel.: (03) 9769-0000

ALPINE ELECTRONICS GmbH
Kreuzerkamp 7-11 40878 Ratingen, Germany
Tel.: 02102-45 50

ALPINE ITALIA S.p.A.
Via C. Colombo 8, 20090 Trezzano Sul Naviglio
MI, Italy
Tel.: 02-48 47 81

ALPINE ELECTRONICS FRANCE S.A.R.L.
(RCS PONTOISE B 338 101 280)
98, Rue De La Belle Etoile, Z.I. Paris Nord II
B.P. 50016 F-95945, Roissy, Charles De Gaulle
Cedex, France
Tel.: 01-48 63 89 89

ALPINE ELECTRONICS OF U.K., LTD.
13 Tanners Drive, Blakelands, Milton Keynes
MK14 5BU, U.K.
Tel.: 01908-61 15 56

ALPINE ELECTRONICS DE ESPAÑA, S.A.
Portal De Gamarra 36, Pabellón 32
01013 Vitoria (Alava)-Apdo. 133, Spain
Tel.: 34-45-283588

Yamagata Printing Co., Ltd.
2-6-34, Takashima, Nishi-ku, Yokohama,
Kanagawa, Japan

Designed by ALPINE Japan
Printed in Japan (Y)
68P41262Y54-O

CD changer for CDA-7878R.
CD-Wechsler für CDA-7878R.
Changeur CD pour CDA-7878R.
Cambiador de CD para CDA-7878R.
Cambia CD per CDA-7878R.
CD-växlare för CDA-7878R.

CHA-S624

CD changer for CDA-7878R.
CD-Wechsler für CDA-7878R.
Changeur CD pour CDA-7878R.
Cambiador de CD para CDA-7878R.
Cambia CD per CDA-7878R.
CD-växlare för CDA-7878R.

CHA-1214

You cannot connect to CDA-7878R.
Ein Anschluß an CDA-7878R ist nicht möglich.
Il est impossible de se raccorder au CDA-7878R.
No es posible conectarlo a CDA-7878R.
Non è possibile effettuare il collegamento a CDA-7878R.
Du kan inte ansluta till CDA-7878R.

CHM-S620

Alpine CD Changers Give You More!

More musical selections, more versatility, more convenience.

An Alpine CD Changer adds more musical choices to your sound system. All models except CHM-S620 can be controlled from Alpine head units and deliver excellent sound quality. The CHA-S624 is a high-performance 6-disc changer with a new M DAC, Ai-NET compatibility, Optical Digital Output, 150 Disc Title Memory and CD TEXT. The CHA-1214 Ai-NET model holds 12 discs, and the CHM-S620 M-Bus model is a super-compact 6-disc changer.

Von Alpine CD-Wechslern haben Sie mehr!

Mehr Musikauswahl, mehr Vielseitigkeit, mehr Komfort.

Mit einem Alpine CD-Wechsler erweitern Sie die Musikauswahl Ihres Systems. Sämtliche Modelle außer dem CHM-S620 lassen sich von einer Alpine-Bedieneinheit aus steuern und liefern hervorragende Klangqualität. Der CHA-S624 ist ein Ai-NET-kompatibler Hochleistungs-Wechsler für 6 CDs mit dem neuen M-DAC, Digitalausgang für Glasfaserkabel, CD-Titelspeicher für 150 Titel und CD-TEXT. Das Ai-NET-Modell CHA-1214 nimmt 12 CDs auf, und der M-Bus-kompatible CHM-S620 ist ein superkompakter Wechsler für 6 CDs.

Changeurs de CD Alpine : vous avez le choix!

Plus de sélections musicales, plus de souplesse, plus de confort.

Un changeur de CD Alpine permet d'augmenter la plage des sélections musicales de votre système embarqué. Tous les modèles, l'exception du CHM-S620, peuvent être contrôlés à partir des autoradios Alpine et offrent une excellente qualité audio. Le modèle CHA-S624 est un changeur 6 disques ultra performant compatible Ai-NET et équipé d'un convertisseur N/A standard, d'une sortie optique numérique, d'une mémoire d'une capacité de 150 titres et de la fonction CD TEXT. Le modèle CHA-1214 Ai-NET peut contenir 12 disques. Le modèle CHM-S620 M-Bus est un changeur 6 disques super compact.

¡Los cambiadores Alpine de CD le ofrecen más!

Más selecciones musicales, más versatilidad y más ventajas.

Un cambiador Alpine de CD añade más opciones musicales a su equipo de sonido. Todos los modelos, excepto el CHM-S620, pueden controlarse desde las unidades principales de Alpine y proporcionar un sonido de calidad excepcional. El modelo CHA-S624 es un cambiador de 6 discos de alto rendimiento con el nuevo DAC "M" y compatibilidad con Ai-NET, salida digital óptica, memoria de títulos de 150 discos y TEXTO CD. El modelo CHA-1214 Ai-NET admite 12 discos y el modelo CHM-S620 Bus-M es un cambiador de 6 discos y tamaño reducido.

I caricatori CD Alpine danno di più!

Più scelta, più versatilità, più comodità.

Un caricatore CD Alpine offre maggiore scelta. Tutti i modelli, eccetto il modello CHM-S620, possono essere controllati tramite le unità di controllo Alpine e producono un suono di qualità eccellente. CHA-S624 è un caricatore a 6 dischi Ai NET compatibile e dotato di un nuovo M DAC, di un'uscita ottica digitale, memorizzazione dei titoli di 150 dischi e CD TEXT. Il modello CHA-1214 Ai NET può contenere un massimo di 12 dischi, mentre il modello CHM-S620 M-Bus è un caricatore a 6 dischi ultra compatto.

Alpines CD-växlare ger mer!

Fler musikval, mer variation, större bekvämlighet.

Med Alpines CD-växlare i systemet får du större musikalisk valfrihet. Alla modeller, utom CHM-S620, kan styras från Alpines huvudenheter och ger enastående ljudkvalitet. CHA-S624 är en högpresterande växlare för 6 skivor med en ny M D/A-omvandlare, kompatibel med Ai-NET, optisk digitalutgång, titelminne för 150 skivor och CD-TEXT. Modellen CHA-1214 Ai-NET rymmer 12 skivor och modellen CHM-S620 M-Bus är en superkompakt växlare för 6 skivor.

Contents

Operating Instructions

⚠ WARNING

WARNING **2**
CAUTION **2**
PRECAUTIONS **2**

Basic Operation

Detaching the Front Panel 4
Attaching the Front Panel 4
Initial System Start-Up 4
Turning Power On and Off 5
Display Angle Adjustment 5
Adjusting Volume/Balance (Between Left and Right)/Fader (Between Front and Rear) 5
Adjusting Source Signal Level 6
Adjusting Display Contrast 6
Subwoofer On and Off 6
Switching the Phase of the Subwoofer Output 7
Setting the Subwoofer Output 7
Sound (Beep) Guide Function 7
Turning Mute Mode On/Off 7
Scroll Setting 8
Setting the AUX Mode (V-Link) 8
Demonstration 9
Defeat 9
Switching the Tuner Mode 9
Blackout Mode On and Off 10
Switching the Display Modes 10
Setting the DHE/EQ for each Music Source 10
Displaying the Title/Text 11
Searching for Titled Discs 11
Titling Discs 12
Erasing Disc Title 12

Radio Operation

Manual Tuning 13
Automatic Seek Tuning 13
Manual Storing of Station Presets 14
Automatic Memory of Station Presets 14
Tuning to Preset Stations 14

RDS Operation

Setting RDS Reception Mode and Receiving RDS Stations 15
Recalling Preset RDS Stations 16
Receiving RDS Regional (Local) Stations 16
PI SEEK Setting 17
Receiving Traffic Information 17
PTY (Programme Type) Tuning 17
Receiving Traffic Information While Playing CD or Radio 18
Priority PTY (Programme Type) 18
Displaying Radio Text 19

CD Player Operation

Opening and Closing the Movable display 20
Playback 20
Music Sensor (Skip) 21
Fast Forward and Backward 21
Repeat Play 21
M.I.X. (Random Play) 22
Scanning Programmes 22
Controlling CD Changer (Optional) 23
Multi-Changer Selection 23

MP3 Operation

Playing MP3 Files 24
Music Sensor (Skip) 24
Fast Forward and Backward 25
Selecting Folders 25
File Search 25
Repeat Play 25
M.I.X. (Random Play) 25
Scanning Programmes 25
Setting the Range of MP3 File Selection 26
About MP3 26

Adjusting the Sound Operation

Selecting DHE Mode 28
Equalizer Presets 28
Adjusting and Storing the Equalizer Curve 29
Recalling the Stored Equalizer Curve 29
Choosing the Listening Position Selector (L.P.S.) 29
The Crossover/Time Correction 30
Adjusting and Storing the Crossover/Time Correction 32
Recalling the Stored Crossover/ Time Correction Settings 33
Customized Sound Database 34

Remote Control Operation

Controls on Remote Control 35
Operating the Audio Processor 36
Battery Replacement 38

Information

In Case of Difficulty 39
Specifications 41

Installation and Connections

Warning 42
Caution 42
Precautions 42
Installation 43
Connections 44

⚠ WARNING

⚠ WARNING

This symbol means important instructions. Failure to heed them can result in serious injury or death.

DO NOT OPERATE ANY FUNCTION THAT TAKES YOUR ATTENTION AWAY FROM SAFELY DRIVING YOUR VEHICLE.

Any function that requires your prolonged attention should only be performed after coming to a complete stop. Always stop the vehicle in a safe location before performing these functions. Failure to do so may result in an accident.

KEEP THE VOLUME AT A LEVEL WHERE YOU CAN STILL HEAR OUTSIDE NOISE WHILE DRIVING.

Failure to do so may result in an accident.

DO NOT DISASSEMBLE OR ALTER.

Doing so may result in an accident, fire or electric shock.

USE ONLY IN CARS WITH A 12 VOLT NEGATIVE GROUND.

(Check with your dealer if you are not sure.) Failure to do so may result in fire, etc.

KEEP SMALL OBJECTS SUCH AS BATTERIES OUT OF THE REACH OF CHILDREN.

Swallowing them may result in serious injury. If swallowed, consult a physician immediately.

USE THE CORRECT AMPERE RATING WHEN REPLACING FUSES.

Failure to do so may result in fire or electric shock.

DO NOT BLOCK VENTS OR RADIATOR PANELS.

Doing so may cause heat to build up inside and may result in fire.

USE THIS PRODUCT FOR MOBILE 12V APPLICATIONS.

Use for other than its designed application may result in fire, electric shock or other injury.

DO NOT PLACE HANDS, FINGERS OR FOREIGN OBJECTS IN INSERTION SLOTS OR GAPS.

Doing so may result in personal injury or damage to the product.

⚠ CAUTION

This symbol means important instructions. Failure to heed them can result in injury or material property damage.

HALT USE IMMEDIATELY IF A PROBLEM APPEARS.

Failure to do so may cause personal injury or damage to the product. Return it to your authorized Alpine dealer or the nearest Alpine Service Centre for repairing.

DO NOT MIX NEW BATTERIES WITH OLD BATTERIES. INSERT WITH THE CORRECT BATTERY POLARITY.

When inserting the batteries, be sure to observe proper polarity (+ and –) as instructed. Rupture or chemical leakage from the battery may cause fire or personal injury.

KEEP FINGERS AWAY WHILE THE MOTORIZED FRONT PANEL OR MOVING MONITOR IS IN MOTION.

Failure to do so may result in personal injury or damage to the product.

⚠ PRECAUTIONS

Temperature

Be sure the temperature inside the vehicle is between +60°C (+140°F) and –10°C (+14°F) before turning your unit on.

Moisture Condensation

You may notice the CD playback sound wavering due to condensation. If this happens, remove the disc from the player and wait about an hour for the moisture to evaporate.

Damaged Disc

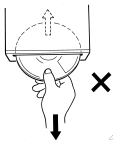
Do not attempt to play cracked, warped, or damaged discs. Playing a bad disc could severely damage the playback mechanism.

Maintenance

If you have problems, do not attempt to repair the unit yourself. Return it to your Alpine dealer or the nearest Alpine Service Station for servicing.

Never Attempt the Following

Do not grip or pull out the disc while it is being pulled back into the player by the automatic reloading mechanism.
Do not attempt to insert a disc into the unit when the unit power is off.

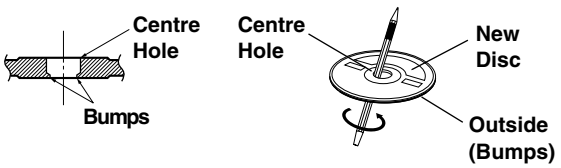


Inserting Discs

Your player accepts only one disc at a time for playback. Do not attempt to load more than one disc.
Make sure the label side is facing up when you insert the disc. Your player will automatically eject any disc that is inserted incorrectly. If the player continues to eject a correctly inserted disc, push the RESET switch with a pointed object such as a ballpoint pen.
Playing a disc while driving on a very bumpy road may result in skips, but this will not scratch the disc or damage the player.

New Discs

As a protective measure to prevent the CD from jamming, the CD player will automatically eject discs with irregular surfaces or inserted incorrectly. When a new disc is inserted into the player and ejected after initial loading, using your finger, feel around the inside of the centre hole and outside edge of the disc. If you feel any small bumps or irregularities, this could inhibit proper loading of the disc. To remove the bumps, rub the inside edge of the hole and outside edge of the disc with a ballpoint pen or other such instrument, then insert the disc again.



Irregular Shaped Discs

Be sure to use round shape discs only for this unit and never use any special shape discs.
Use of special shape discs may cause damage to the mechanism.

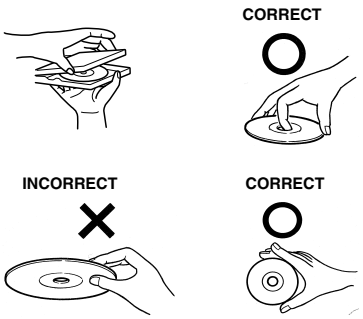
Installation Location

Make sure the CDA-7878R will not be installed in a location subjected to:

- Direct sun and heat
- High humidity and water
- Excessive dust
- Excessive vibrations

Correct Handling

Do not drop the disc while handling. Hold the disc so you will not leave fingerprints on the surface. Do not affix tape, paper, or gummed labels to the disc. Do not write on the disc.

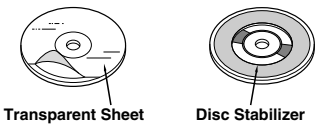


Disc Cleaning

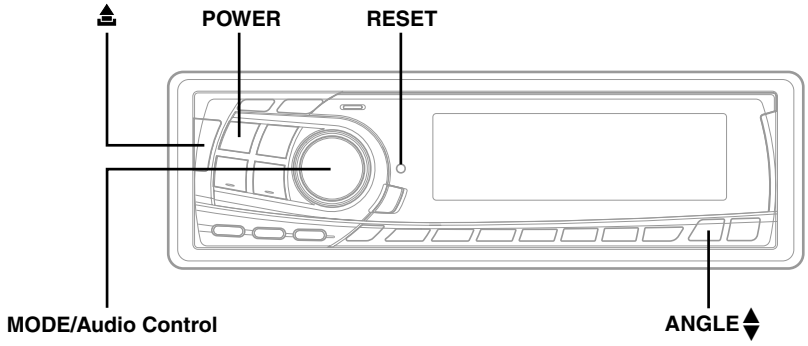
Fingerprints, dust, or soil on the surface of the disc could cause the CD player to skip. For routine cleaning, wipe the playing surface with a clean, soft cloth from the centre of the disc to the outer edge. If the surface is heavily soiled, dampen a clean, soft cloth in a solution of mild neutral detergent before cleaning the disc.

Disc Accessories

There are various accessories available on the market for protecting the disc surface and improving sound quality. However, most of them will influence the thickness and/or diameter of the disc. Using such accessories can cause the disc to be out of standard specifications and may create operational problems. We recommend not using these accessories on discs played in Alpine CD players.



Basic Operation

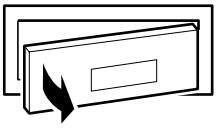


Detaching the Front Panel

1 Press and hold the **POWER** button for at least 2 seconds to turn off the power.

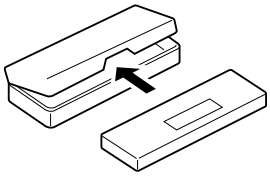
2 Press the ⏏ (Release) button at upper left side until the front panel pops out.

3 Grasp the left side of the front panel and pull it out.



NOTES

- *The front panel may become hot in normal usage (especially the connector terminals on the back of the front panel.) This is not a malfunction.*
- *To protect the front panel, place it in the supplied carrying case.*

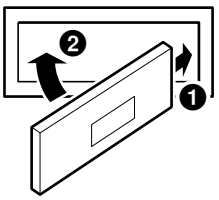


Connectable to Remote Control Interface Box
You can operate this unit from the vehicle's control unit when an Alpine Remote Control Interface Box (optional) is connected. For details, contact your Alpine dealer.

Attaching the Front Panel

1 First, insert the right side of the front panel into the main unit. Align the groove on the front panel with the projections on the main unit.

2 Push the left side of the front panel until it locks firmly into the main unit.



NOTE

Before attaching the front panel, make sure that there is no dirt or dust on the connector terminals and no foreign object between the front panel and the main unit.

Initial System Start-Up

Immediately after installing or applying power to the unit, it should be initialized. Press the **RESET** switch with a ballpoint pen or any other pointed object.

Turning Power On and Off

1 Press the **POWER** button to turn on the unit.

NOTE

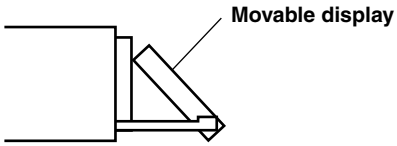
The unit can be turned on by pressing any other button except the eject ⏏ button.

The volume level gradually increases to the previous level you were listening to before the unit was turned off. Press and hold the **POWER** button for at least 2 seconds to turn off the unit.

NOTE

The first time power is turned on, the volume will start from level 12 and the unit will be in the tuner mode.

Display Angle Adjustment



The movable display may be adjusted to 3 different angles depending upon user preference.

1 Press the **ANGLE ▲▼** button to adjust the angle of the movable display.

NOTES

- *The display will close a half minute after the ignition key is turned to the OFF position.*
- *The adjusted angle of the display is stored in memory. There is no need to re-adjust the angle when the power is turned back on.*

CAUTION

Keep hands (or any other object) away from the display while it is opening or closing to avoid damage or injury. The back of the movable display will get very warm under normal operating conditions. This is not a malfunction. Do not touch.

Adjusting Volume/Balance (Between Left and Right)/Fader (Between Front and Rear)

1 Press the **MODE** button repeatedly to choose the desired mode.
Each press changes the modes as follows:

→ BALANCE → FADER → VOLUME →

NOTES

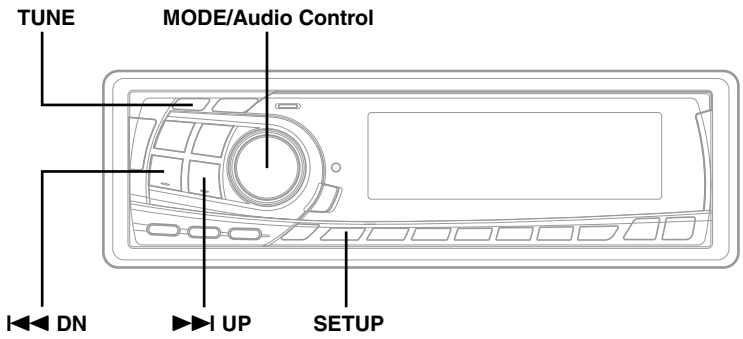
- *If the MODE button is not pressed within 5 seconds after selecting the BALANCE or FADER mode, the unit automatically returns to the VOLUME mode.*
- *When the subwoofer mode is ON, its level may also be adjusted.*
- *When setting the 3WAY/2WAY switch (page 45) to 3WAY, you cannot adjust the FADER mode.*

2 Rotate the **Audio Control** knob until the desired sound is obtained in each mode.

NOTE

Depending on the connected devices, some functions and display indications do not work.

Basic Operation



Adjusting Source Signal Level

If the difference in volume level between the CD player and FM radio is too great, adjust the FM signal level as follows.

1 Press and hold the **SETUP** button for at least 2 seconds.

2 Press the **►►I UP** button repeatedly to select "FM-LEVEL."
Each press of the **►►I UP** button scrolls the modes as follows:

FM-LEVEL↔ REGIONAL↔PI SEEK ↔TUNER↔SUB-W
↕ ↕
DEMO SUB-W
↕ (switching phase)*
CONTRAST ↕
↕ SUB-W
AUX STEREO/MONO*
↕ ↕
MUTE
↕
SCROLL ↔ BEEP ↔ DISC/FOLDER ↔ SRC DHE

* Displayed when you set SUB-W to ON.

NOTE
When you press the I◄◄ DN button, the display scrolls in the reverse sequence.

3 Press the **TUNE** button to select the FM signal level mode. Each press toggles between "FM-LEVEL HI" (High) and "FM-LEVEL LO" (Low).

4 Press the **SETUP** button to activate the normal mode.

Adjusting Display Contrast

You can adjust the display contrast for better visibility.

1 Press and hold the **SETUP** button for at least 2 seconds.

2 Press the **►►I UP** button repeatedly to select "CONTRAST."

3 Press the **TUNE** button to adjust the contrast of the display. You can adjust in a range of -5 and +5.
The initial setting at the factory is "0."

4 Press the **SETUP** button to set the selected mode.

Subwoofer On and Off

1 Press and hold the **SETUP** button for at least 2 seconds.

2 Press the **►►I UP** button repeatedly to select "SUB-W."

3 Press the **TUNE** button to toggle mode between SUB-W ON and SUB-W OFF.

4 Press the **SETUP** button after setting the SUB-W ON.

5 Press the **MODE** button repeatedly to select the SUB-W mode.

→ SUB-W → BALANCE
VOLUME ← FADER ←

6 Rotate **Audio Control** knob until the desired sound is obtained in each mode.

Switching the Phase of the Subwoofer Output

You can switch the phase of the subwoofer output to NORMAL 0˚ or REVERSE 180˚.
To select the desired phase.

1 Press and hold the **SETUP** button for at least 2 seconds.

2 Press the ►►I**UP** button to select "Switching the phase of the SUB-W (SUB-W NORMAL or REVERSE) mode."

3 Press the **TUNE** button to select NORMAL (0˚) or REVERSE (180˚).

NOTE
The initial setting at the factory is SUB-W NORMAL.

4 Press the **SETUP** button to set the selected mode.

Setting the Subwoofer Output

You can set the subwoofer output to stereo or monaural.
Make sure to set the correct output for your subwoofer type.

1 Press and hold the **SETUP** button for at least 2 seconds.

2 Press the ►►I**UP** button to select "Switching the SUB-W monaural/Stereo (SUB-W STEREO or MONO) mode."

3 Press the **TUNE** button to select SUB-W STEREO or MONO.

SUB-W STEREO:
Subwoofer stereo (L/R) output

SUB-W MONO:
Subwoofer monaural output.

NOTE
The initial setting at the factory is SUB-W STEREO.

4 Press the **SETUP** button to set the selected mode.

Sound (Beep) Guide Function

This function will give audible feedback with varying tones depending upon the button pressed.

1 Press and hold the **SETUP** button for at least 2 seconds.

2 Press the ►►I **UP** button repeatedly to select "BEEP."

3 Press the **TUNE** button to toggle the mode between BEEP ON and BEEP OFF.

NOTE
The initial setting at the factory is BEEP ON.

4 Press the **SETUP** button to set the selected mode.

Turning Mute Mode On/Off

If a device having the interrupt feature is connected, audio will be automatically muted whenever the interrupt signal is received from the device. This function can be turned ON or OFF from the head unit by following procedure below.

1 Press and hold the **SETUP** button for at least 2 seconds.

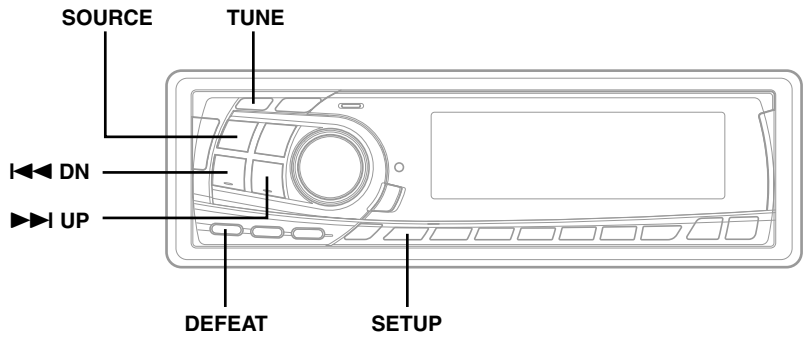
2 Press the ►►I **UP** button to select the MUTE mode.

3 Press the **TUNE** button to turn on or off the MUTE mode.
Each press toggles between the MUTE ON and OFF modes.

NOTE
The initial setting at the factory is "MUTE ON."

4 Press the **SETUP** button again to return to normal operation.

Basic Operation



Scroll Setting

This CD player can scroll the disc and track names recorded on CD-TEXT discs, as well as the text information of MP3 files, folder names, and ID3 tags.

1 Press and hold the **SETUP** button for at least 2 seconds.

2 Press the **►►I UP** button repeatedly to select "SCROLL."
Each press of the **►►I UP** button changes the modes as shown:

FM-LEVEL↔ REGIONAL↔PI SEEK ↔TUNER↔SUB-W
↕ ↕
DEMO SUB-W
↕ (switching phase)*
CONTRAST ↕
↕ SUB-W
AUX STEREO/MONO*
↕ ↕
MUTE
↕
SCROLL ↔ BEEP ↔ DISC/FOLDER ↔ SRC DHE

* Displayed when you set SUB-W to ON.

NOTE

If you press the I◄◄ DN button, the display scrolls in reverse sequence.

3 Press the **TUNE** button to toggle mode between SCROLL AUTO and MANU.

- SCROLL AUTO: the CD text information, the text information of folder and file names, and the ID3 tags are scrolled automatically.
- SCROLL MANU: the display is scrolled only when a disc is loaded or when a track is changed and the text information exceeds 12 digits.

4 When the setting is completed, press the **SETUP** button to return to the normal mode.

NOTES

- *Initial mode is "SCROLL MANU."*
- *The unit scrolls CD text names, folder names, file names or ID3 tag display. The disc titles input manually (refer to page 12) cannot be scrolled.*

Setting the AUX Mode (V-Link)

You can input TV/video sound by connecting an optional Ai-NET/RCA Interface cable (KCA-121B) or Versatile Link Terminal (KCA-410C) to this component.

1 Press and hold the **SETUP** button for at least 2 seconds.

2 Press the **►►I UP** button repeatedly to select "AUX."
Each press of the **►►I UP** button changes the modes as shown:

FM-LEVEL↔ REGIONAL↔PI SEEK ↔TUNER ↔ SUB-W
↕ ↕
DEMO SUB-W
↕ (switching phase)*
CONTRAST ↕
↕ SUB-W
(AUX Mode Display Setting**) STEREO/MONO*
↕ DISC/ ↕
AUX↔MUTE↔SCROLL↔BEEP↔FOLDER↔SRC DHE

* Displayed when you set SUB-W to ON.
** Displayed when you set AUX IN to ON.

NOTE

If you press the I◄◄ DN button, the display scrolls in reverse sequence.

3 Press the **TUNE** button to toggle the mode between AUX IN ON and AUX IN OFF.

NOTES

- *The initial setting at the factory is AUX IN OFF.*
- *You can set the AUX mode display by pressing the ⏮ DN or ⏭ UP button after AUX IN ON is set, select the AUX mode display setting, and then press the TUNE button.*
- *When connecting the KCA-410C, you can set two AUX mode displays.*

4 Press the **SETUP** button to return to normal mode.

5 To adjust the volume, etc., first press the **SOURCE** button and select the AUX mode, then make the necessary adjustment.

NOTE

When using the Versatile Link Terminal (KCA-410C), you can connect two external inputs. To select the mode, press the BAND button on the unit.

Demonstration

This unit has a Demonstration feature which simulates the display functions.

1 Press and hold the **SETUP** button for at least 2 seconds.

2 Press the **⏭ UP** button to select the DEMO mode. Each press changes the modes as shown:

FM-LEVEL↔ REGIONAL↔PI SEEK ↔TUNER↔SUB-W
↕ ↕
DEMO SUB-W
↕ (switching phase)*
CONTRAST ↕
↕ SUB-W
AUX STEREO/MONO*
↕ ↕
MUTE
↕
SCROLL ↔ BEEP ↔ DISC/FOLDER ↔ SRC DHE

* Displayed when you set SUB-W to ON.

NOTE

If you press the ⏮ DN button, the display scrolls in reverse sequence.

3 Press the **TUNE** button to turn on or off the DEMO mode.
Each press toggles between DEMO ON and DEMO OFF.

If no button is pressed for 30 seconds, the DEMO mode activates.

NOTES

- *The initial setting at the factory is "DEMO OFF."*
- *To quit DEMO mode, set to "DEMO OFF."*

4 Press the **SETUP** button again to return to normal operation.

Defeat

Use the DEFEAT button to return the previously adjusted settings of DHE, EQ, and CSD (Customized Sound Database) to the factory default settings.

1 Press and hold the **DEFEAT** button for at least 2 seconds to turn Defeat on.

To cancel Defeat, press and hold the **DEFEAT** button again for at least 2 seconds.

Switching the Tuner Mode

The CDA-7878R incorporates the MAX TUNE PRO for the highest quality tuner audio. Moreover, you can choose between 3 settings to suit your own personal sound preferences and usage.

1 Press and hold the **SETUP** button for at least 2 seconds.

2 Press the **⏭ UP** button repeatedly to select "TUNER."

3 Press the **TUNE** button to switch the TUNER mode.

→ TUNER HI-FI → TUNER NORMAL → TUNER STABLE

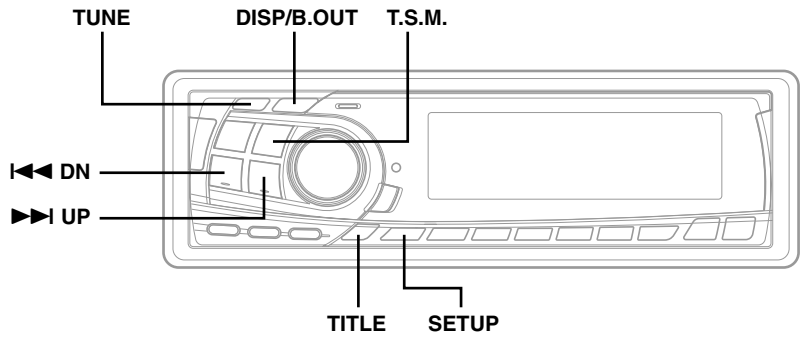
- TUNER NORMAL : Standard setting
- TUNER HI-FI : Sound quality priority setting
- TUNER STABLE : Noiseless priority setting

NOTES

- *The initial setting at the factory is "NORMAL." This is the best compromise between sound quality and noise immunity.*
- *If you switch the tuner to HI-FI mode and find the station is too noisy, we recommend you change back to the NORMAL mode.*

4 When the setting is completed, press the **SETUP** button to return to the normal mode.

Basic Operation



Blackout Mode On and Off

When the Blackout mode is turned on, the display will turn off to reduce power consumption.
This additional power enhances the sound quality.

1 Press and hold the **B.OUT** button for at least 2 seconds to start the blackout mode. By doing so the display will turn off.

NOTE
If any button on the unit is pressed during the blackout mode, the function will be displayed for 5 seconds to show the operation before returning to Blackout mode.

To cancel the blackout mode, press and hold the **B.OUT** button for at least 2 seconds.

Switching the Display Modes

You can select the display pattern mode from three display patterns. You can also deactivate the display.

1 Press the **DISP** (DISPLAY) button to select the desired Display pattern mode.

Each press changes the display patterns.

→ Pattern1 → Pattern2 → Pattern3 → Display OFF

Setting the DHE/EQ for each Music Source

You can set the DHE/EQ independently for each music source (e.g., radio, CD, MP3, etc.).

1 Press and hold the **SETUP** button for at least 2 seconds.

2 Press the **►►I UP** button repeatedly to select "SRC DHE."
Each press of the **►►I UP** button changes the modes as shown:

FM-LEVEL↔ REGIONAL↔PI SEEK ↔TUNER↔SUB-W
↕ ↕
DEMO SUB-W
↕ (switching phase)*
CONTRAST ↕
↕ SUB-W
AUX STEREO/MONO*
↕ ↕
MUTE
↕
SCROLL ↔ BEEP ↔ DISC/FOLDER ↔ SRC DHE

* Displayed when you set SUB-W to ON.

NOTE
If you press the I◄◄ DN button, the display scrolls in reverse sequence.

3 Press the **TUNE** button to toggle the mode between SRC DHE ON and SRC DHE OFF.

SRC DHE ON:
You can set the DHE/EQ independently for each music source (e.g., radio, CD, MP3, etc.).

SRC DHE OFF:
You can set the same DHE/EQ for all the music sources at the same time.

NOTE
The initial setting at the factory is SRC DHE OFF.

4 Press the **SETUP** button to set the selected mode.

Displaying the Title/Text

It is possible to display the CD title if the title has been previously inputted. For details, see "Titling Discs" (page 12). Text information, such as the disc name and the track name, will be displayed if playing a CD text compatible disc. It is also possible to display the folder name, the file name, and the ID3 tag, etc. while playing MP3 files.

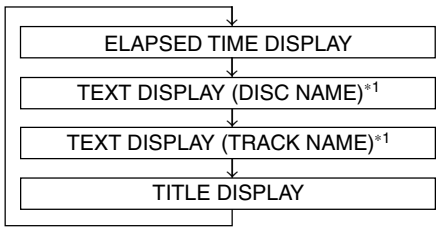
1 Press the **TITLE** button.
The mode will change every time the button is pressed.

About "Title" and "Text"

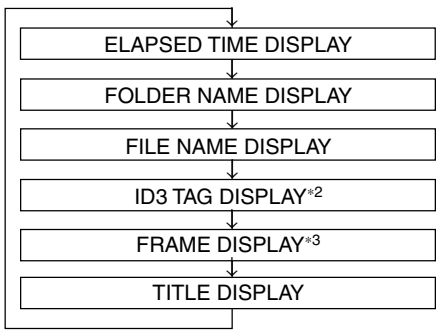
Title: With this device, it is possible to input the CD name (refer to page 12). This inputted name is referred to as a "title."

Text: Text compatible CDs contain text information such as the disc name and track name. Such text information is referred to as "text."

CD/Changer mode:



MP3 mode:



*1 Displayed during playback of a disc with CD Text. "NO TEXT" will be displayed when the CD contains no text data.

*2 If an MP3 file contains ID3 tag information, all the ID3 tag information is displayed (e.g., track name, artist name, and album name). No other information is displayed.
"NO TAG" will be displayed when an MP3 file contains no ID3 tag information.

*3 The recording sampling rate and bit rate of the MP3 file are displayed.

NOTES

- *Some characters may not be displayed correctly with this device, depending on the character type.*
- *The CD changer must also be CD Text compatible for the Text information to be displayed.*
- *When the Scroll Setting (refer to page 8) is set to "SCROLL MANU", press and hold the TITLE button for at least 2 seconds to scroll the Text information only once (TEXT DISPLAY, FOLDER NAME DISPLAY, FILE NAME DISPLAY or ID3 TAG DISPLAY mode).*
- *"No Support" is displayed when the desired text information cannot be displayed on this unit.*
- *If the title was not previously input, "----------" is displayed.*

Searching for Titled Discs

If a CD is titled, you can do a search for it. (To title CDs, refer to "Titling Discs" on page 12.)

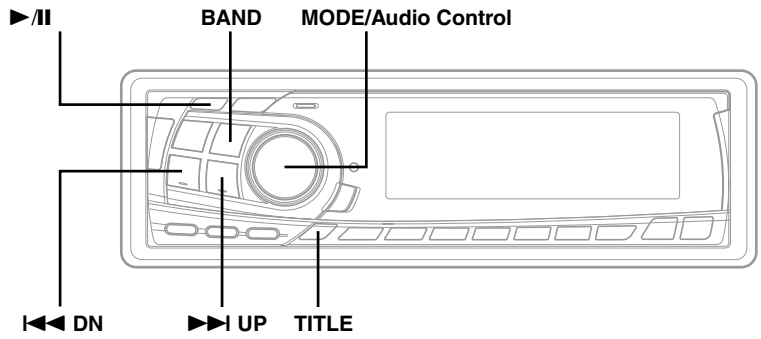
1 When the unit is in CD Changer mode, press and hold the **T.S.M.** button for at least 2 seconds. The title blinks in the display.

2 Press the **I◄◄ DN** or **►►I UP** button to select the desired disc title from the CD changer.

3 Press the **T.S.M.** button to play the selected disc. The unit will automatically search for the disc and begin play.

NOTE

This function cannot be performed when using a multi-changer switching device.



Titling Discs

It is possible to title your favourite CD's.

1 Press the **TITLE** button and select the title display mode.
For details, see “Displaying the Title/Text” (page 11).

2 Press and hold the **TITLE** button for at least 2 seconds. The first character will blink.

3 Press the **BAND** button to select the characters/symbols.
→ Upper case → Lower case → Numeral/Symbol

4 Rotate the **Audio Control** knob to select the desired letter/numeral/symbol available for naming. (“A” for example).

5 Press the **MODE** button to store the first character. The first character will stop blinking and the display will automatically advance to the next character. When that character begins to blink, you may choose the next letter or symbol of your title.

6 Repeat the steps 3 to 5 above to complete the titling. Pressing the **MODE** button after entering the 12th character, automatically stores the title into memory.

When entering a title of less than 12 characters (for example, 3 character title):
After entering 3 characters to complete your title, the 4th character space will be blinking. Go to step 7 to complete the title.

7 Press and hold the **TITLE** button for at least 2 seconds to record the title.

NOTES

- *You can enter 24 CD titles on this unit. If you try to store beyond the limit, the display will show “FULL DATA.” At this point, no more titles can be stored.*
- *The CD Changer title length or memory capacity varies depending upon the model being used.*
- *To input a new title, one of the previously inputted titles must first be deleted.*
- *When you want to erase a title, enter the “▒” symbol into all spaces.*
- *The operations described in steps 3 to 6 must be made within 10 seconds. The input mode will be cancelled if no action is taken for over 10 seconds.*
- *Removing power from the unit may delete these titles. Use caution when manipulating the power cord.*

Erasing Disc Title

1 Press the **TITLE** button to select the titling mode. Then, press and hold the button for at least 2 seconds.

2 Press and hold the **►/II** button for at least 2 seconds to activate the title scanning mode. The title in the display will blink.

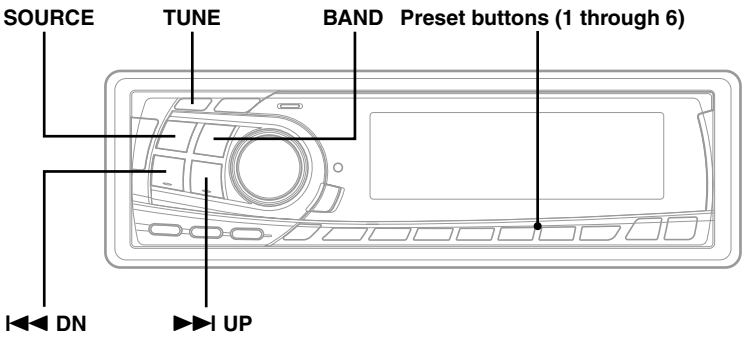
3 Press the **I◄◄ DN** or **►►I UP** button repeatedly until the title you want to erase is displayed.

4 Press and hold the **►/II** button for at least 2 seconds to erase the title displayed.

5 Press and hold the **TITLE** button for at least 2 seconds to cancel the title erasing mode.

NOTE

You cannot erase CD-TEXT.



Manual Tuning

1 Press the **SOURCE** button until a radio frequency appears in the display.

2 Press the **BAND** button repeatedly until the desired radio band is displayed.
Each press changes the band:

→ FM1 → FM2 → FM3 → MW → LW

3 Press the **TUNE** button repeatedly until "DX SEEK" and "SEEK" disappear from the display.

NOTE
The initial mode is DX SEEK.

4 Press the **I◄◄ DN** or **►►I UP** button to move downward or upward one step respectively until the desired station frequency is displayed.

NOTE
The ST indicator appears on the display when a Stereo FM station is tuned in.

Automatic Seek Tuning

1 Press the **SOURCE** button until a radio frequency appears in the display.

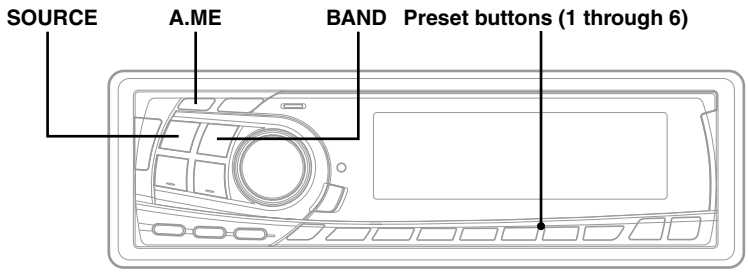
2 Press the **BAND** button repeatedly until the desired radio band is displayed.
Each press changes the band:

→ FM1 → FM2 → FM3 → MW → LW

3 Press the **TUNE** button to illuminate the DX and SEEK indicators in the display.
With the DX (Distance) mode activated, both strong and weak stations will be tuned in the Auto-Seek operation.
Press again to return to the local mode. The DX indicator will turn off and the SEEK indicator will remain illuminated. Now, only strong stations will be tuned.

4 Press the **I◄◄ DN** or **►►I UP** button to automatically seek for a station downward or upward respectively.
The unit will stop at the next station it finds.
Press the same button again to seek the next station.

Radio Operation



Manual Storing of Station Presets

1 Select the radio band and tune in a desired radio station you wish to store in the preset memory.

2 Press and hold any one of the **Preset buttons (1 through 6)** for at least 2 seconds until the station frequency on the display blinks.

3 Press the **Preset** button into which you wish to store the station while the frequency display is blinking (within 5 seconds).
The display stops blinking once the station has been memorized. The display shows the band, preset No. with a triangle ( ) and station frequency memorized.

4 Repeat the procedure to store up to 5 other stations onto the same band.
To use this procedure for other bands, simply select the band desired and repeat the procedure.
A total of 30 stations can be stored in the preset memory (6 stations for each band; FM1, FM2, FM3, MW and LW).

NOTE

If you store a station in a preset memory which already has a station, the current station will be cleared and replaced with the new station.

Automatic Memory of Station Presets

1 Press the **SOURCE** button to select the radio mode.

2 Press the **BAND** button repeatedly until the desired radio band is displayed.

3 Press and hold the **A. ME** button for at least 2 seconds.
The frequency on the display continues to change while the automatic memory is in progress. The tuner will automatically seek and store 6 strong stations in the selected band. They will be stored into buttons **Preset 1 to 6** in order of signal strength.
When the automatic memory has been completed, the tuner goes to the station stored in the preset location No. 1.

NOTE

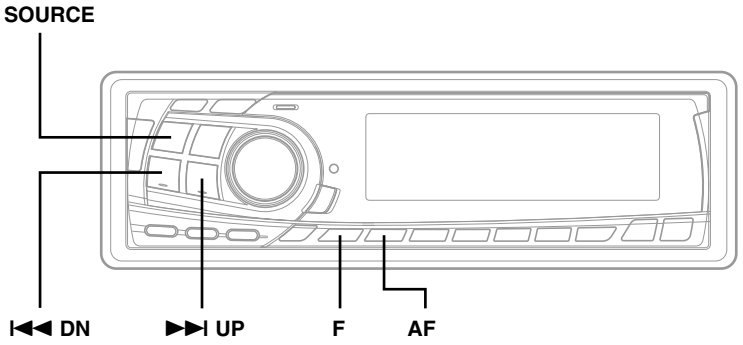
If no stations are stored, the tuner will return to the original station you were listening to before the auto memory procedure began.

Tuning to Preset Stations

1 Press the **SOURCE** button to select the radio mode.

2 Press the **BAND** button repeatedly until the desired band is displayed.

3 Press the station **Preset** button that has your desired radio station in memory.
The display shows the band, preset number with a triangle and frequency of the station selected.



Setting RDS Reception Mode and Receiving RDS Stations

The RDS (Radio Data System) is a radio information system using the 57 kHz subcarrier of regular FM broadcast. The RDS allows you to receive a variety of information such as traffic information, station names, and to automatically re-tune to a stronger transmitter that is broadcasting the same programme.

1 Press the **SOURCE** button until a radio frequency appears in the display.

2 Press the "**F**" button. The ***((FUNC))*** indicator will illuminate.

3 Press the **AF** button to activate the RDS mode.

4 Press the **I◄◄ DN** or **►►I UP** button to tune in the desired RDS station.

NOTE

When the BAND button is pressed for at least 2 seconds while the PS (Programme Service Name) is being displayed, the display shows the station frequency for 5 seconds, then returns to the previous display.

5 Press the **AF** button to deactivate the RDS mode.

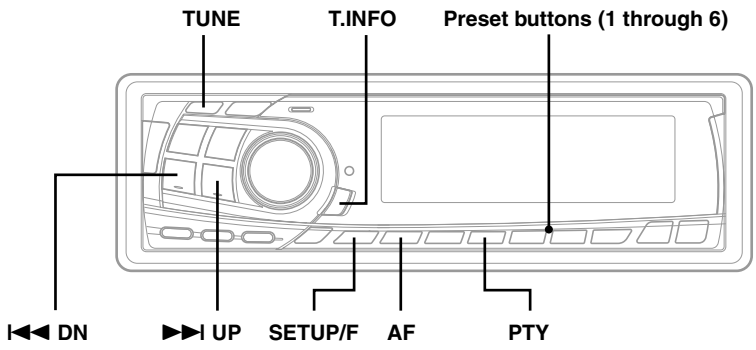
6 Press the "**F**" button to activate the normal mode. The ***((FUNC))*** indicator will turn off.

Tips

- When the unit receives the PTY31 (Emergency Broadcast) signal, the unit will show "ALARM" in the display automatically.
- The RDS digital data includes the followings:

PI	Programme Identification
PS	Programme Service Name
AF	List of Alternative Frequencies
TP	Traffic Programme
TA	Traffic Announcement
PTY	Programme Type
EON	Enhanced Other Networks
R.TEXT	Radio Text Information

RDS Operation



Recalling Preset RDS Stations

1 Press the "**F**" button. The ***((FUNC))*** indicator will illuminate.

2 Press the **AF** button to activate the RDS mode. The display shows "AF" when the RDS mode is activated.

3 Press the "**F**" button to activate the normal mode. The ***((FUNC))*** indicator will turn off.

4 Press the **1 through 6 buttons** in which your desired RDS station is preset. If the preset station's signal is weak, the unit automatically searches and tunes to a stronger station in the AF (Alternative Frequencies) list.

5 If the preset station and the stations in the AF list cannot be received:

When the PI SEEK setting is on (refer to "PI SEEK Setting" on page 17), the unit searches again for a station in the PI (Programme Identification) list.
If there are still no stations receivable in the area, the unit displays the frequency of the preset station and the preset indicator disappears.

If the signal level of the Regional (Local) station being tuned becomes too weak to receive, press the same preset button to tune in a Regional station in other district.

NOTE

For presetting the RDS stations, refer to the Radio Operation section. The RDS stations can be preset in the FM1, FM2 and FM3 bands only.

Receiving RDS Regional (Local) Stations

1 Press and hold the **SETUP** button for at least 2 seconds to activate the setting mode.

2 Press the **►►I UP** button repeatedly to select "REGIONAL". Each press of the **►►I UP** button scrolls the modes as shown:

FM-LEVEL↔ REGIONAL↔PI SEEK ↔TUNER↔SUB-W
↕ ↕
DEMO SUB-W
↕ (switching phase)*
CONTRAST ↕
↕ SUB-W
AUX STEREO/MONO*
↕ ↕
MUTE
↕
SCROLL ↔ BEEP ↔ DISC/FOLDER ↔ SRC DHE

* Displayed when you set SUB-W to ON.

NOTE

If you press the I◄◄ DN button, the display scrolls in reverse sequence.

3 Press the **TUNE** button to turn on or off the "REGIONAL" mode.
In the "REGIONAL OFF" mode, the unit automatically keeps receiving the related local RDS station.

4 Press the **SETUP** button to deactivate the setting mode.

PI SEEK Setting

1 Press and hold the **SETUP** button for at least 2 seconds.

2 Press the **►►I UP** button repeatedly to select "PI SEEK."

3 Press the **TUNE** button to toggle the mode between "PI SEEK ON" and "PI SEEK OFF."

4 Press the **SETUP** button to set the selected mode.

Receiving Traffic Information

1 Press the **T.INFO** button to activate the Traffic Information mode.
To cancel the Traffic information mode, press the **T.INFO** button again.

2 Press the **I◄◄ DN** or **►►I UP** button to select your desired traffic information station. When a traffic information station is tuned in, the TP indicator lights up.

Traffic information is heard only when it is being broadcast. If traffic information is not being broadcast, the unit is set in the standby mode. When a traffic information broadcast begins, the unit automatically receives it and the display shows "TRAFFIC-INFO" for 5 seconds, then returns to the previous display.

When traffic information broadcast is over, the unit will automatically set in the standby mode.

NOTES

- *If the traffic information broadcast signal falls below a certain level, the unit remains in the receiving mode for 1 minute. If the signal remains below a certain level for over 1 minute, the "T.INFO" indicator blinks.*
- *If you do not want to listen to the traffic information being received, lightly press the T.INFO button to skip that traffic information message. The T.INFO mode will remain in the ON position to receive the next traffic information message.*
- *If the volume level is changed while receiving traffic information, the changed volume level will be memorized. When traffic information is received next time, the volume level will be automatically adjusted to the level memorized.*
- *In the T.INFO mode, the SEEK tuning selects only the TP stations.*

PTY (Programme Type) Tuning

1 Press the "**F**" button. The **((FUNC))** indicator will illuminate.

2 Press the **PTY** button to activate the PTY mode. The Programme Type of the station being currently received will be displayed for 5 seconds.

If there is no receivable PTY broadcast, "NO PTY" will be displayed for 5 seconds.

NOTE

If no buttons are pressed within 5 seconds after pressing the PTY button, the PTY mode will be automatically cancelled.

3 Press the **I◄◄ DN** and **►►I UP** buttons within 5 seconds after activating the PTY mode to choose the desired programme type while the PTY (programme type) is being displayed. Each press scrolls the programme type by one.

┌→ LIGHT M ↔ CLASSICS ↔ OTHER M ←┐
└ — — — — — — — — — — — — ┘

4 Press the **PTY** button within 5 seconds after selecting the programme type to start searching for a station in the selected programme type. The chosen programme type indicator blinks during searching and lights when a station is found.

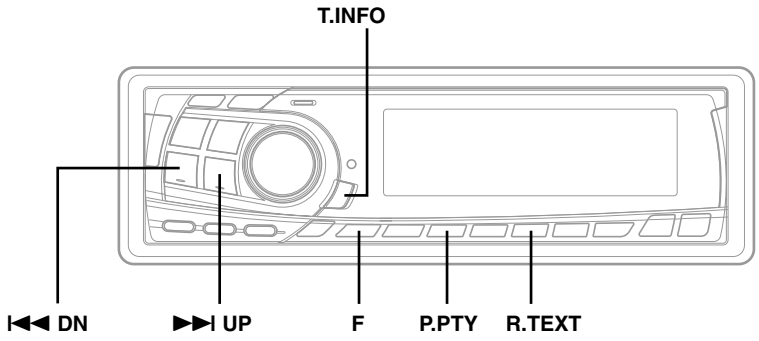
If no station is found, "NO PTY" will be displayed for 5 seconds.

5 Press the "**F**" button to activate the normal mode. The **((FUNC))** indicator will turn off.

NOTE

*Operate the unit while the **((FUNC))** indicator is illuminated.*
*If no buttons are pressed within 5 seconds, the **((FUNC))** indicator will turn off.*

RDS Operation



Receiving Traffic Information While Playing CD or Radio

1 Press the **T.INFO** button repeatedly until the T.INFO indicator appears in the display.

2 Press the **I◄◄ DN** and **►►I UP** buttons to select a traffic information station if necessary.

- When a traffic information broadcast starts, the unit automatically mutes the CD player or the regular FM broadcast.
- When the traffic information broadcast finishes, the unit automatically returns to the original source play before the traffic information broadcast began.
- **When traffic information stations cannot be received:**
  In the tuner mode:
  When the TP signal can no longer be received for over 1 minute, the "T.INFO" indicator blinks.
  In the CD mode:
  When the TP signal can no longer be received, the traffic information station of another frequency will be selected automatically.

NOTE

The receiver is equipped with the EON (Enhanced Other Networks) function in order to keep track of additional alternative frequencies to the AF list. The EON indicator appears while an RDS EON station is being received. If the station being received does not broadcast the traffic information, the receiver automatically tunes in the related station that broadcasts the traffic information when it occurs.

3 Press the **T.INFO** button to deactivate the Traffic Information mode. The T.INFO indicator disappears.

Priority PTY (Programme Type)

This function allows presetting of a programme type such as music category, news, etc. You can listen to a programme in the preset programme type as the unit automatically gives priority to the preset programme type when it begins broadcasting, and interrupts the programme you are currently listening. This feature is functional when your unit is set to a mode other than the LW and MW.

1 Press the "**F**" button. The ***((FUNC))*** indicator will illuminate.

2 Press the **P. PTY** button to activate the PRIORITY PTY mode.
"PRIO-PTY" is displayed for 2 seconds and then the programme type for 3 seconds. The initial setting is "NEWS."

NOTE

If no buttons are pressed within 5 seconds after pressing the P. PTY button, the PRIORITY PTY mode is automatically cancelled.

3 Press the **I◄◄ DN** or **►►I UP** button within 5 seconds while "NEWS" is being displayed to choose a desired programme type. Then press **P. PTY** button. The PRIORITY PTY function will activate.

4 Press the **P. PTY** button to activate the PRIORITY PTY mode again.

- To change the programme category, perform the step 3.
- To disable the PRIORITY PTY function, press and hold the **P. PTY** button for at least 2 seconds.

NOTE

In the PRIORITY PTY function, unlike in the T.INFO function, the volume does not increase during operation.

5 Press the "**F**" button to activate the normal mode. The ***((FUNC))*** indicator will turn off.

NOTE

Operate the unit while the ***((FUNC))*** *indicator is illuminated.*
If no buttons are pressed within 5 seconds, the ***((FUNC))*** *indicator will turn off.*

Displaying Radio Text

Text messages from a radio station can be displayed.

1 Tune in a radio station that transmits text messages.

2 Press the "**F**" button. The ***((FUNC))*** indicator illuminates.

3 Press the **R.TEXT** button to activate the Radio Text mode. The display shows "WAIT" for a few seconds, then starts scrolling the text message. It continues until other operation is performed.

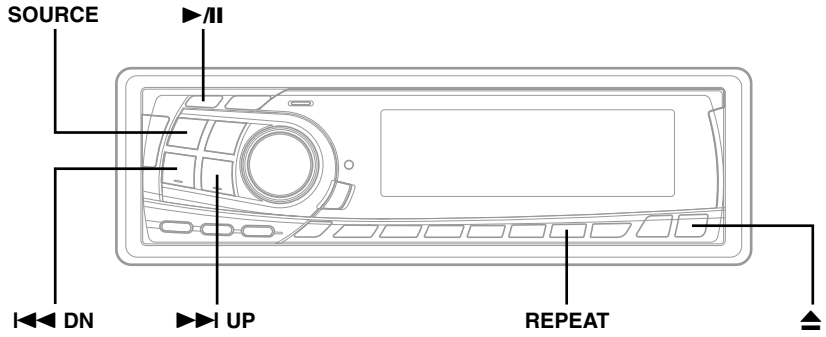
4 To cancel the Radio Text mode, press the **R.TEXT** button.

5 Press the "**F**" button to return to the normal operation mode. The ***((FUNC))*** indicator disappears from the display.

NOTES

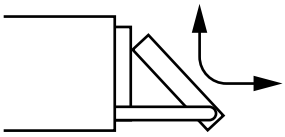
- *If there is no receivable text message or the unit cannot receive a text message properly, the display shows "NO TEXT" for 2 seconds.*
- *Operate the unit while the* ***((FUNC))*** *indicator is illuminated.*
  If no buttons are pressed within 5 seconds, the ***((FUNC))*** *indicator will turn off.*

CD Player Operation



Opening and Closing the Movable display

1 Press the ⏏ button.
The movable display will open.



To close the movable display, press the ⏏ button again.
The movable display will close.

NOTES

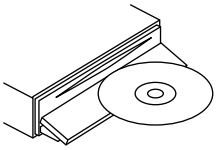
- *Do not apply shock to the movable display when it is open as it may result in malfunction of the unit.*
- *The display may be dim during low temperatures and immediately after turning on the power. The brightness will return to normal as time elapses.*
- *The display will stop at the set angle when closing.*

CAUTION

Keep hands (or any other object) away from the display while it is opening or closing to avoid damage or injury. The back of the movable display will get very warm under normal operating conditions. This is not a malfunction. Do not touch.

Playback

1 Press the ⏏ button.
The movable display will open.



Insert a disc with the label side facing up.

2 Insert a disc with the label side facing up.
The disc will be pulled into the unit automatically.
The movable display will close and playback will begin.
When a disc is already inserted, press the **SOURCE** button to switch to the CD mode.
The mode will change every time the button is pressed.

⟶ TUNER ⟶ CD ⟶ CD CHANGER∗ ⟶

(∗ Only when the CD changer is connected)

3 To pause playback, press the ►/II button.
Pressing the ►/II button again will resume playback.

4 To eject the disc, press the ⏏ button.

NOTE

If the CD does not eject, press ⏏ button again for more than 2 seconds with the movable display open.

About the usable discs.
We recommend using only compact discs containing the marks shown below.
You can play CD-Rs (CD-Recordable)/CD-RWs (CD-ReWritable) for audio use on this unit. You can also play CD-Rs/CD-RWs containing MP3 formatted audio files.

- Some of the following CDs may not play on this unit:
  Flawed CDs, CDs with fingerprints, CDs exposed to extreme temperatures or sunlight (e.g., left in the car or this unit), CDs recorded under unstable conditions, CDs on which a recording failed a re-recording was attempted.
- Use discs with MP3 files written in the format compliant with ISO 9660 level 1 or level 2. For details, see page 27.

On handling Compact Discs (CD/CD-R/ CD-RW)
- Do not touch the surface.
- Do not expose the disc to direct sunlight.
- Do not affix stickers or labels and do not write on the surface.
- Clean the disc when it is dusty.
- Make sure that there are no bumps around the disc.
- Do not use commercially available disc accessories.

Do not leave the disc in the car or the unit for a long time. Never expose the disc to direct sunlight. Heat and humidity may damage the CD and you may not be able to play it again.

Music Sensor (Skip)

1 Momentarily press the **I◄◄ DN** button once during CD play to return to the beginning of the current track. If you wish to access the beginning of a track further back, repeatedly press until you reach the desired track.

Press the **►►I UP** button once to advance to the beginning of the next track. If you wish to access the beginning of a track further ahead, press repeatedly until the desired track is reached.

NOTE
The music sensor feature is functional in the play or pause mode.

Fast Forward and Backward

1 Press and hold the **I◄◄ DN** or **►►I UP** button to quickly move backward or forward until you reach the desired section of the track.

Repeat Play

1 Press the **REPEAT** button to play back repeatedly the track being played.
The track will be played repeatedly.

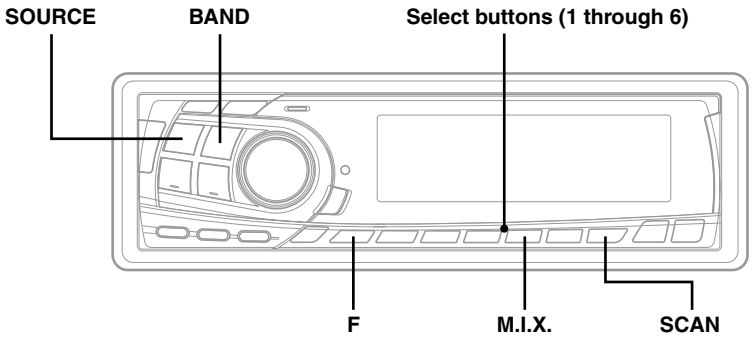
Press the **REPEAT** button again and select OFF to deactivate the repeat play.

NOTES
- *If a CD Changer is connected and the RPT-ALL mode is selected, the unit repeatedly plays back all tracks on the disc selected.*

  ⟶ RPT- ⟶ RPT- ALL ⟶ (off) ⟶

- *In case a 6-disc CD changer is connected:*
  In CD changer mode, press the "F" button to illuminate the (FUNC) indicator and go to step 1 within 5 seconds.
- *In case a 12-disc CD changer is connected:*
  In changer mode, press the "F" button twice to illuminate the (FUNC) indicator and go to step 1 within 5 seconds.

CD Player Operation



M.I.X. (Random Play)

1 Press the **M.I.X.** button in the play or pause mode. The tracks on the disc will be played back in a random sequence. After all the tracks on the disc have been played back once, the player will begin a new random sequence play until the M.I.X. mode is cancelled.

To cancel M.I.X. play, press the **M.I.X.** button again to turn off the M.I.X.

NOTES

- *If a CD Changer equipped with the ALL M.I.X. function is connected, ALL M.I.X. will also be selectable. In this mode, the tracks on all the CDs in the current magazine will be included in the random playback sequence.*

  ⟶ M.I.X. ⟶ ALL -M.I.X. ⟶ (off) ⟶

- *In case a 6-disc CD changer is connected: In CD changer mode, press the "F" button to illuminate the (FUNC) indicator and go to step 1 within 5 seconds.*
- *In case a 12-disc CD changer is connected: In CD changer mode, press the "F" button twice to illuminate the (FUNC) indicator and go to step 1 within 5 seconds.*

Scanning Programmes

1 Press the **SCAN** button to activate the Scan mode.
The first 10 seconds of each track will be played back in succession.

To stop scanning, press the **SCAN** button and deactivate the Scan mode.

NOTES

- *In case a 6-disc CD changer is connected: In CD changer mode, press the "F" button to illuminate the (FUNC) indicator and go to step 1 within 5 seconds.*
- *In case a 12-disc CD changer is connected: In CD changer mode, press the "F" button twice to illuminate the (FUNC) indicator and go to step 1 within 5 seconds.*

Controlling CD Changer (Optional)

An optional 6-disc or 12-disc CD Changer may be connected to the CDA-7878R if it is Ai-NET compatible. With a CD Changer connected to the Ai-NET input of the CDA-7878R, the CD Changer will be controllable from the CDA-7878R.
Using the KCA-400C (Multi-Changer Switching device) or the KCA-410C (Versatile Link Terminal) multiple changers can be controlled by the CDA-7878R.
See the Multi-Changer Selection section on page 23 for selecting the CD Changers.

NOTES

- *The controls on the CDA-7878R for CD Changer operation are operative only when a CD Changer is connected.*
- *The "changer" indicator illuminates in the CD Changer mode.*
- *The DVD changer (optional) is controllable from the CDA-7878R as well as the CD changer.*

1 Press the **SOURCE** button to activate the CHANGER mode. The display shows the "Changer," disc number and track number.

NOTE

The source indicator varies depending on the connected source.

2 Press the Disc **Select buttons (1 through 6)** corresponding to one of the discs loaded in the CD Changer. The selected disc number appears in the display and CD playback starts.

NOTES

- *After selecting the desired disc, you can operate in the same way as for the CDA-7878R CD player. For details, please see the CD Operation section.*
- *If the (FUNC) indicator is illuminated the Disc Select buttons become nonfunctional.*

When a 12-disc CD Changer is connected:
To select discs numbered from 1 to 6, the procedure is the same as for the 6-disc CD Changer. To select discs numbered from 7 to 12, first press the "F" button. This changes the "D" indicator to "d." Then press the desired Preset button. With the "F" button activated, the Preset buttons 1 to 6 will represent discs 7 to 12 respectively.

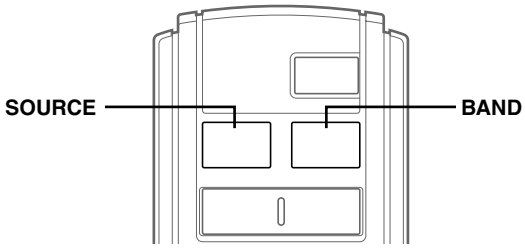
Multi-Changer Selection

Alpine's Ai-NET system will support up to 6 CD Changers. When operating two or more changers, the KCA-400C (Multi-Changer Switching device) must be used. If you use 1 Switching device, you can connect up to 4 CD Changers. If you use 2 Switching devices, you can connect up to 6 CD Changers. When using KCA-410C (Versatile Link Terminal), you can connect two changers and two external outputs (AUX).

1 Press the **SOURCE** button on the CDA-7878R to activate the CD Changer mode.

— — — — — — — — — — — — — — — —

Alternatively, press the SOURCE button on the Remote Control (RUE-4187) to activate the CD Changer mode. Proceed to step 3 below to select the desired CD Changer.



2 Press the **BAND** button on the CDA-7878R or the RUE-4187 to activate the CD Changer Selection mode.

3 The CD Changer Selection mode remains active for 3 seconds after step 2 is performed. Press the **BAND** button until the desired CD Changer indicator appears on the display.

NOTE

If the selected CD Changer is not connected, the display will show "NO CHGR ."

— — — — — — — — — — — — — — — —

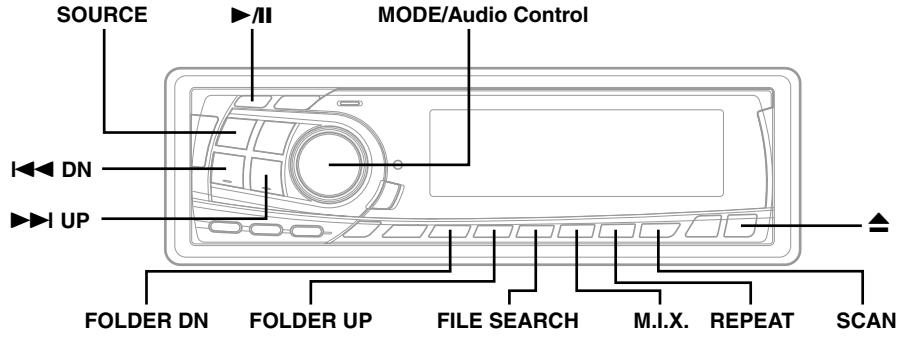
Alternatively press the **BAND** button on the Remote Control until the desired changer indicator appears on the display.

4 To operate the selected changer, see "CD Player Operation" section.

NOTE

For further details about the external input (AUX) when using KCA-410C, see "Setting the AUX Mode (V-Link)" on page 8.

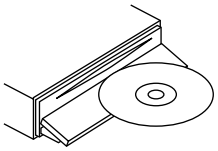
MP3 Operation



Playing MP3 Files

You can play CD-ROMs, CD-Rs, and CD-RWs containing MP3 files on this unit.
Use the format compliant with ISO 9660 level 1 or level 2.
For further information about playing or storing MP3 files, refer to pages 26-27 before using the unit.

1 Press the ⏏ button.
The movable display will open.



Insert a disc containing an MP3 file with the label side facing up.

2 Insert a disc containing an MP3 file with the label side facing up.
The disc will be pulled into the unit automatically. The movable display will close and playback will begin.
When a disc is already inserted, press the **SOURCE** button to switch to the CD mode.
The mode will change every time the button is pressed.

→ TUNER ⟶ CD ⟶ CD CHANGER* ┐
└──────────────────────────────┘

(* Only when the CD changer is connected)

3 To pause playback, press the **►/II** button.
Pressing the **►/II** button again will resume playback.

4 To eject the disc, press the ⏏ button.

NOTES

- *The unit can play discs containing both audio data and MP3 data.*
- *The MP3 indicator is lit during MP3 playback.*

Music Sensor (Skip)

1 Momentarily press the **I◄◄ DN** button once during CD play to return to the beginning of the current file or track. If you wish to access the beginning of a track further back, repeatedly press until you reach the desired file or track.

Press the **►►I UP** button once to advance to the beginning of the next file or track. If you wish to access the beginning of a track further ahead, press repeatedly until the desired file or track is reached.

NOTES

- *The music sensor feature is functional in the play or pause mode.*
- *Files are played back in their pathname order which was used when they were written to the CD.*

Fast Forward and Backward

1 Press and hold the **I◀◀ DN** or **▶▶I UP** button to quickly move backward or forward until you reach the desired section of the file.

Note

There is no audio output during fast forward/backward for MP3 files.

Selecting Folders

1 Press the **FOLDER DN** or **FOLDER UP** button to select the folder.

File Search

You can locate all the files on a disc and play them.

1 Press the **FILE SEARCH** button during playback. The unit switches to File Search Mode.

2 Rotate the **Audio Control** knob to select the desired file.

3 Press the **MODE** button to cancel the File Search Mode. The selected file starts to play.

Repeat Play

1 Press the **REPEAT** button to play back repeatedly the track being played.
The track will be played repeatedly.

Press the **REPEAT** button again and select OFF to deactivate the repeat play.

RPT- ⟷ (off)

M.I.X. (Random Play)

1 Press the **M.I.X.** button in the play or pause mode. The files or tracks on the disc will be played back in a random sequence. After all the files and tracks on the disc have been played back once, the player will begin a new random sequence play until the M.I.X. mode is cancelled.

To cancel M.I.X. play, press the **M.I.X.** button again to turn off the M.I.X.

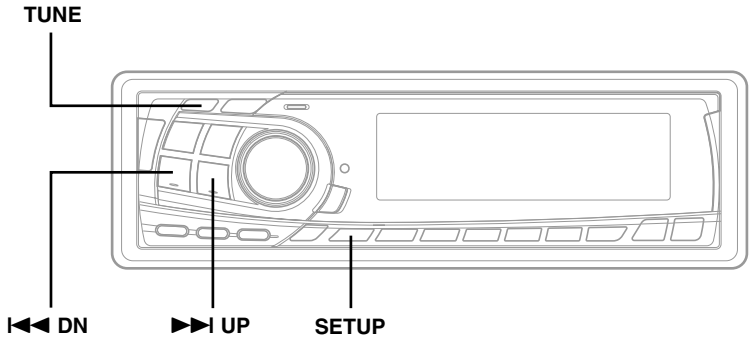
-M.I.X. ⟷ (off)

Scanning Programmes

1 Press the **SCAN** button to activate the Scan mode.
The first 10 seconds of each file or track will be played back in succession.

To stop scanning, press the **SCAN** button and deactivate the Scan mode.

MP3 Operation



Setting the Range of MP3 File Selection

You can set the range of MP3 file selection to "entire disc contents" or "folder contents only."

1 Press and hold the **SETUP** button for at least 2 seconds.

2 Press the **►►I UP** button repeatedly to select DISC/FOLDER (track selection range).
Each press of the **►►I UP** button changes the modes as shown.

FM-LEVEL↔ REGIONAL↔PI SEEK ↔TUNER↔SUB-W
↕ ↕
DEMO SUB-W
↕ (switching phase)*
CONTRAST ↕
↕ SUB-W
AUX STEREO/MONO*
↕ ↕
MUTE
↕
SCROLL ↔ BEEP ↔ DISC/FOLDER ↔ SRC DHE

* Displayed when you set SUB-W to ON.

NOTE
If you press the **I◄◄ DN** *button, the display scrolls in reverse sequence.*

3 Press the **TUNE** button to toggle the mode between DISC ALL and FOLDER ONLY.
- DISC ALL : plays all the files on one disc
- FOLDER ONLY : plays files in the selected folder only.

NOTE
The initial setting at the factory is DISC ALL.

4 Press the **SETUP** button to set the selected mode.

About MP3

CAUTION
Except for personal enjoyment, duplicating audio data (including MP3 data) or distributing, transferring, or copying it, whether for free or for a fee, without the permission of the copyright holder is strictly prohibited by the Copyright Act and by international treaty.

- **What is MP3?**

MP3, whose official name is "MPEG Audio Layer 3", is a compression standard prescribed by the ISO, the International Standardization Organization and MPEG which is a joint activity institution of the IEC.

MP3 files contain compressed audio data. MP3 encoding is capable of compressing the audio data at extremely high ratios shrinking music files by as much as one-tenth their original size. This is achieved while still maintaining near CD quality. The MP3 format realizes such high compression ratios by eliminating the sounds that are either inaudible to the human ear or masked by other sounds.

- **Method for creating MP3 files**

The software used to create MP3 files is widely sold or free from various sources. For details on creating MP3 files, refer to the user's manual for that software.
The MP3 files that can be played back by this device have the file extension "mp3." Files with no extension cannot be played back.

- **Supported playback sampling rates and bit rates**

  Sampling rates: 8 kHz - 44.1 kHz, bit rates: 8 - 320 kbps
  Note that for sampling rates such as 11,025 kHz, this device's frame display (Page 11) may not display correctly.

- **ID3 tags**

  This device supports ID3 tag v1.
  If ID3 tag data is in an MP3 file, this device can display the title (track title), artist name, and album name ID3 tag data.

  This device can only display single-byte alphanumeric characters and the underscore. For non-supported characters, "No Support" is displayed.

  This device can only display up to 64 characters for each data item.

- **Producing MP3 discs**

  MP3 files are prepared, then written to a CD-R or CD-RW using CD-R writing software. Each disc can hold up to 255 files/folders (including Root Folders).

- **Media supported**

  The media that this device can play back are CD-ROMs, CD-Rs, and CD-RWs.

- **Corresponding File Systems**

  This device supports discs formatted with ISO9660 Level 1 or Level 2.

  Under the ISO9660 standard,
  there are some restrictions to remember.
  The maximum nested folder depth is 8 (including the root directory). File/folder names are limited to 31 characters (including the extension).
  Valid characters for folder/file names are letters A-Z (all caps), numbers 0-9, and '_' (underscore).

  This device also can playback discs in Joliet, RockRidge, Apple ISO, and other standards that conform to ISO9660. However, sometimes the file names, folder names, etc. are not displayed correctly.

- **Formats supported**

  This device supports CD-ROM XA, Mixed Mode CD, Enhanced CD (CD-Extra) and Multi-Session. This device can not correctly play back discs recorded with Track At Once or packet writing.

- **Order of tracks**

  Track playback is based on the pathname order used for the files when they were written to the CD.

  - When CD audio and MP3 files are both present on a disk, playback starts from Folder No. 2. Also, the track display for CD audio data playback is the track numbers recorded on the disc.

Terminology

Bit rate

This is the "sound" compression rate specified for encoding. The higher the bit rate, the higher the sound quality, but also the larger the files.

Sampling rate

This value shows how many times per second the data is sampled (recorded). For example, music CDs use a sampling rate of 44.1 kHz, so the sound level is sampled (recorded) 44,100 times per second. The higher the sampling rate, the higher the sound quality, but also the larger the volume of data.

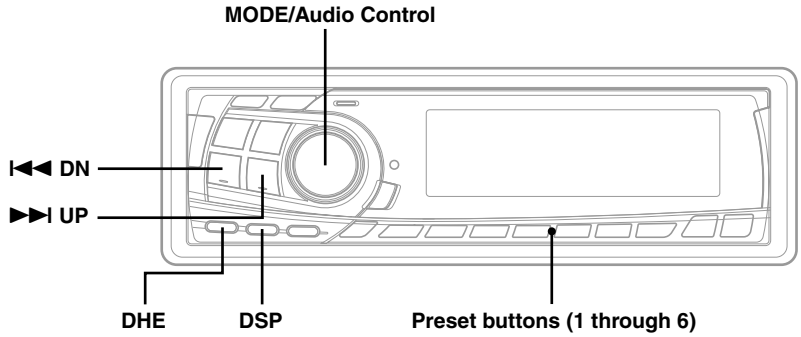
Encoding

Converting music CDs, WAVE (AIFF) files, and other sound files into the specified audio compression format.

ID3 tag

Song information such as track titles, artist names, album names, etc., written into MP3 files.

Adjusting the Sound Operation



Selecting DHE Mode

Using digital signal processing technology, DHE (Digital Harmonics Enhancer) operates on harmonic components which determine tone and coloration of the musical instruments. The process operates independently on individual frequency bands, so each instrument or vocal will be distinct. Play back clarity is enhanced to compensate for road noises which would normally detract from the listener's enjoyment.

1 Press the **DHE** button to activate the DHE selecting mode. The display flashes.

2 Press the **►►I UP** button to select the desired mode.

→ BASS MODE1 ↔ BASS MODE2 ↔ BASS MODE3 ←
↳ NON EFFECT ↔ ALL MODE ↔ VOCAL MODE ←┘

BASS MODE 1 (DHE 1): Reproduces tight bass sound.
BASS MODE 2 (DHE 2): Reproduces ample volume bass sound.
BASS MODE 3 (DHE 3): Reproduces bass sound echoing in the core of your car.
VOCAL MODE (DHE4): Reproduces vocal sounds more clearly.
ALL MODE (DHE5): Reproduces a well-balanced and clear sound for all music genres.
NON EFFECT (OFF)

NOTE
If you press the I◄◄ DN button, the display scrolls in reverse sequence.

Selecting directly
Select the desired button (1 through 6).
[1] : BASS MODE1 [4] : VOCAL MODE
[2] : BASS MODE2 [5] : ALL MODE
[3] : BASS MODE3 [6] : NON EFFECT (OFF)

3 When the setting is complete, press the **DHE** button to return to normal mode.

NOTE
This function is inoperable when DEFEAT is ON (refer to page 9).

Equalizer Presets

3 typical equalizer settings are preset at the factory for a variety of musical source material.

1 Press the **DSP** button and select the EQ mode. The mode will change every time the button is pressed.

→ EQ ↔ EQ MEMORY ↔ LPS ↔ OFF ←

2 Press either the **I◄◄ DN** button or the **►►I UP** button.
- With each press of the button, the equalizer mode will display the selected equalizer characteristic.

→ FLAT (OFF) ↔ POPS ↔ ROCK ↔ NEWS ←

FLAT: Flat frequency
POPS: Suppress midrange
ROCK: Emphasize lows and highs
NEWS: Boost midrange and suppress highs and lows

Selecting directly
Select the desired button (1 through 4).
[1] : FLAT (OFF) [3] : ROCK
[2] : POPS [4] : NEWS

3 When the setting is complete, press the **DHE** button to select OFF, and return to normal mode.

→ EQ ↔ EQ MEMORY ↔ LPS ↔ OFF ←

NOTE
This function is inoperable when DEFEAT is ON (refer to page 9).

Adjusting and Storing the Equalizer Curve

You can modify the Equalizer settings to create a response curve more appealing to your personal taste.

1 Select the equalizer characteristic to adjust. See "Equalizer Presets" (on page 28).

2 Press the **MODE** button. The Frequency band indication in the display flashes.

3 Rotate the **Audio Control** knob to adjust to your desired level.

4 Press the **MODE** button to flash the next frequency band indication.

5 Rotate the **Audio Control** knob to adjust to your desired level.

6 Repeat the steps 4 to 5 above until all the frequency bands (16 kHz) are adjusted.

To store the adjusted contents

1) Press and hold the **MODE** button for at least 2 seconds.
   The display flashes and you can store the adjusted curve.
   (When pressing one of the **1 - 6** buttons, you can also store the adjusted curve.)
2) While the display is blinking, press one of the **1 - 6** buttons that you want to store.

NOTE

The contents of DHE/EQ can be stored. (The settings of LPS are not stored.)

7 Press the **DSP** button to select OFF to return to normal mode.

NOTE

You can also select the frequency band to be adjusted by pressing the ⏮ DN button or ⏭ UP button.

Recalling the Stored Equalizer Curve

1 Press the **DSP** button to select EQ MEMORY mode.

→ EQ ⟷ EQ MEMORY ⟷ LPS ⟷ OFF ←

2 Press the **⏮ DN** button or **⏭ UP** button to select your desired curve form the MEMORY 1 - MEMORY 6.

Direct select

Press one of **1 - 6** buttons to activate your desired curve.

(If you select the PRESET 2)

3 Press the **DSP** button to select OFF to return to normal mode.

→ EQ ⟷ EQ MEMORY ⟷ LPS ⟷ OFF ←

NOTE

This function is inoperable when DEFEAT is ON (refer to page 9).

Choosing the Listening Position Selector (L.P.S.)

This feature gives the user the ability to adjust the time delay of the 4 main speakers to provide the ideal sound stage for each listener in the car. The staging can be optimized for the front passenger, driver, front passenger and driver, or front and rear passengers and driver.

1 Press the **DISP** button to select LPS mode.

→ EQ ⟷ EQ MEMORY ⟷ LPS ⟷ OFF ←

2 Press either **⏮ DN** button or **⏭ UP** button. The seat position will change every time the button is pressed.
Select the desired seat position.

→ OFF ⟷ ALL ⟷ FRONT ←
→ FRONT-R ⟷ FRONT-L ←

Direct select

Press the desired button from the **1 - 5** buttons.

[1] : OFF
[2] : ALL
[3] : FRONT
[4] : FRONT-L
[5] : FRONT-R

3 Press the **DSP** button to select OFF to return to normal mode.

→ EQ ⟷ EQ MEMORY ⟷ LPS ⟷ OFF ←

NOTE

You cannot use the L.P.S. and Time Correction at the same time.

Adjusting the Sound Operation

The Crossover/Time Correction

Crossover:

This unit is equipped with an Active Crossover. The crossover limits the frequencies delivered to the outputs. Each channel is controlled independently. Thus, each speaker pair can be driven by the frequencies for which they have been optimally designed.
The divider adjusts the HPF (high pass filter) or LPF (low pass filter) of each band, and also the slope (how fast the filter rolls off the highs or lows).

Adjustments should be made according to the reproduction characteristics of the speakers. Depending on the speakers, a passive network may not be necessary. If you are unsure about this point, please consult your authorized Alpine dealer.

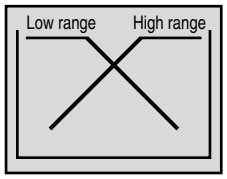
2 way mode

	Cut-off frequency (1/3 octave steps)		Slope		Level
	HPF	LPF	HPF	LPF	
Low range speaker	----	20 Hz - 200 Hz	----	FLAT, 6, 12, 18, 24 dB/ oct	0 to –12 dB
Front high range speaker	20 Hz - 200 Hz	----	FLAT, 6, 12, 18, 24 dB/ oct	----	0 to –12 dB
Rear high range speaker	20 Hz - 200 Hz	----	FLAT, 6, 12, 18, 24 dB/ oct	----	0 to –12 dB

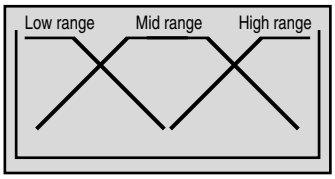
3 way mode

	Cut-off frequency (1/3 octave steps)		Slope		Level
	HPF	LPF	HPF	LPF	
Low range speaker	----	20 Hz - 200 Hz	----	FLAT, 6, 12, 18, 24 dB/ oct	0 to – 12 dB
Mid range speaker	20 Hz - 200 Hz	20 Hz - 20 kHz	FLAT, 6, 12, 18, 24 dB/ oct	FLAT, 6, 12, 18, 24 dB/ oct	0 to –12 dB
High range speaker*	20 Hz - 20 kHz	----	FLAT, 6, 12, 18, 24 dB/ oct	----	0 to –12 dB

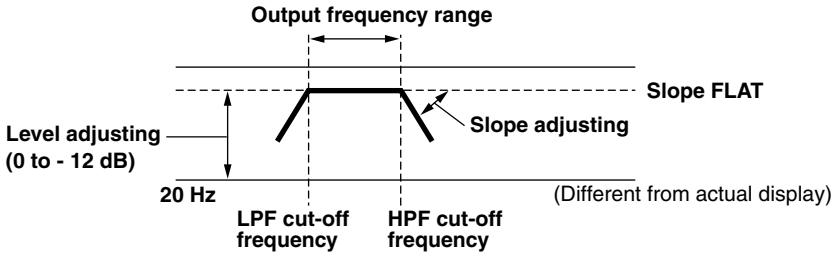
* *When setting the high range HPF filter to FLAT, do not turn up the volume too much. This may damage the speaker.*



(Different from actual display)



(Different from actual display)



(Different from actual display)

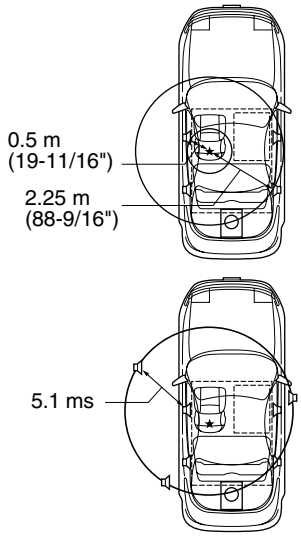
NOTES

- *HPF (high pass filter): Cuts the lower frequencies and allows the higher frequencies to pass.*
- *LPF (low pass filter): Cuts the higher frequencies and allows the lower frequencies to pass.*
- *Slope: The level change (in dB) for a frequency change of one octave.*
- *The higher the slope value, the steeper the slope becomes.*
- *Adjust the slope to FLAT to bypass the HP or LP filters.*
- *Do not use a tweeter without the HPF on or set to a low frequency, as it may cause damage to the speaker due to the low frequency content.*
- *You cannot adjust the crossover frequency higher than the HPF or lower than the LPF.*

Time Correction:

The distance between the listener and the speakers in a car vary widely due to the special conditions of the mobile environment. This difference in the distances from the speakers to the listener creates a shift in the sounds image and frequency characteristics. This is caused by the time delay between the sound reaching the listener's right versus the left ear.
To correct this, the CDA-7878R is able to delay the audio signal to the speakers closest to the listener. This effectively creates a perception of increased distance for those speakers. The listener can be placed at an equal distance between the left and right speakers for optimum staging.
The adjustment will be made for each speaker in a step of 0.1 mS.

Example 1. Listening Position: Front Left Seat
Adjust the time correction level of the front left speaker to a high value and the rear right to zero or a low value.



Here we calculate the time correction value for the front left speaker in the diagram at the left.
Conditions:
Farthest Speaker – listening position: 2.25 m (88-9/16")
Front left speaker – listening position: 0.5 m (19-11/16")
Calculation: L = 2.25 m – 0.5 m = 1.75 m (68-7/8")
Time correction = 1.75 ÷ 343* × 1000 = 5.1 (ms)
*Speed of sound: 343 m/s (765 mph) at 20˚C

In other words, giving the front left speaker a time correction value of 5.1 ms makes it seem as if the distance to the front left speaker is the same as the distance to the farthest speaker.

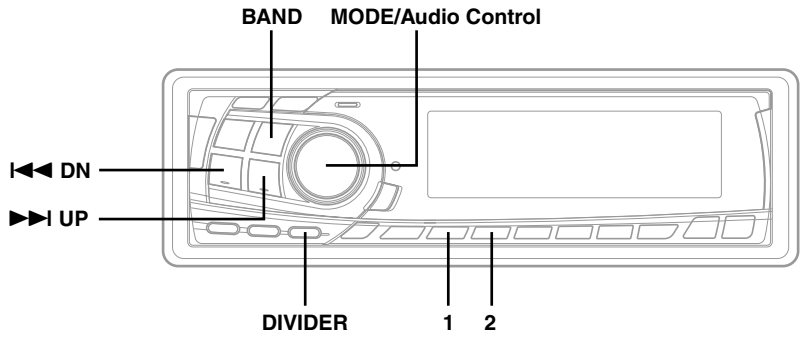
The sound is not balanced because the distance between the listening position and the various speakers is different.
The difference in distance between the front left speaker and the rear right speaker is 1.75 m (68-7/8").

Time correction eliminates the differences in the time required for the sound to reach the listening position. The time of the front left speaker is corrected by 5.1 ms so that its sound reaches the listening position at the same time as the sound of other speakers.

Example 2. Listening Position: All Seats
Adjust the time correction level of each speaker to almost the same level.

1. Sit in the listening position (driver's seat, etc.) and measure the distance (in meters) between your head and the various speakers.
2. Calculate the difference between the distance to the farthest speaker and the other speakers.
   L = (distance to farthest speaker) – (distance to other speakers)
3. Divide the distances calculated for the speakers by the speed of sound (343 m/s (765 mph) at 20˚C).
   These values are the time correction values for the different speakers.

Adjusting the Sound Operation



Adjusting and Storing the Crossover/ Time Correction

Before performing the following procedures, refer to “Crossover” (page 30) and “Time Correction” (page 31).

1 Press and hold the **DIVIDER** button for at least 2 seconds.

Adjust the cut-off frequency/slope

2 Press the **BAND** button to select the channel to adjust.

2 way system

→ Low range (LPF) → Front High range (HPF)
Rear High range (HPF)* ←

3 way system

→ Low range (LPF) → Mid range (HPF)
High range (HPF)* ← Mid range (LPF) ←

* Press the MODE button to activate the Output Level-adjusting mode.

3 Press the **I◄◄ DN** or **►►I UP** button to select the desired cut-off frequency point (cross over point).

2 way system
You can select the frequency from 20 Hz to 200 Hz (1/3 octave step) for each channel.

3 way system
Low range (LPF) /Mid range (HPF):
You can select the frequency from 20 Hz to 200 Hz (1/3 octave step).
Mid range (LPF) /High range (HPF):
You can select the frequency from 20 Hz to 20 kHz (1/3 octave step).

4 Rotate the **Audio Control** knob to adjust the slope.
Slope can be adjusted to FLAT, 6, 12, 18, or 24 db/oct.

5 To adjust another channel, repeat steps 2 to 4. When the adjustment is completed, press the **DIVIDER** button.

Adjust the output level

6 Press the **BAND** to select the channel to be adjusted.

2 way system

Low range (L) → Low range (R) → Front high range (L)
Rear high range (R)* ← Rear high range (L) ← Front high range (R) ←

3 way system

Low range (L) → Low range (R) → Mid range (L)
High range (R)* ← High range (L) ← Mid range (R) ←

* Press the MODE button to switch to the Time Correction Adjusting mode.

7 Rotate the **Audio Control** knob (Rotary encoder) to adjust the output level.
You can adjust the level from –12 to 0.

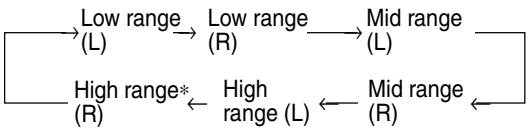
8 To adjust another channel, repeat the steps 6 to 7, then press the **DIVIDER** button.

Adjusting the Time Correction

9 Press the **BAND** button to select the channel to be adjusted.

2 way system

3 way system



* Press the MODE button to switch to the Cut-off frequency/Slope Adjusting mode.

10 Rotate the **Audio Control** knob to adjust the value of the Time Correction (0.0 - 20.0).

11 To adjust another channel, repeat the steps 9 to 10.

12 When all the adjustments are completed, press and hold the **DIVIDER** button for at least 2 seconds to cancel the Adjusting mode.

Storing the adjustments

You can store the adjustments.

13 Press and hold the **MODE** button for at least 2 seconds to store the settings (Or press the **1** or **2** button).
The display flashes.

14 While the display is flashing, press the **1** or **2** button.
The divider and the Time correction settings are stored.

15 Press the **DIVIDER** button to return to normal mode.

NOTES

- ***About the 2 way/3 way system***
  You can switch to 2way/3 way system mode with the 2 way/3 way switch on the side of the unit. (See on page 45)

When setting to "3 WAY":
The unit can be operated in 3-way system.
When setting to "F/R/Sub-W":
The unit can be operated in 2-way system.

- *You cannot use the L.P.S. and Time Correction at the same time.*

Recalling the Stored Crossover/ Time Correction Settings

1 Press the **DIVIDER** button.

2 Press the **I◄◄ DN** or **►►I UP** button to select the stored content (Memory 1 or Memory 2).

Direct Recalling

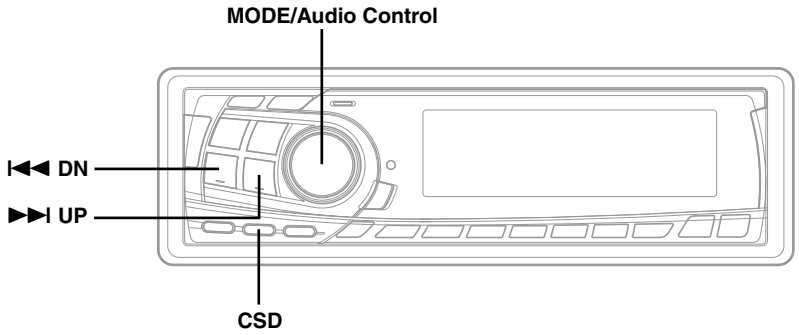
Press the [1] or [2] button to recall the stored adjustment.

3 Press the **DIVIDER** button to return to normal mode.

NOTE

If you press the MODE button in step 2, the unit switches to adjusting mode.

Adjusting the Sound Operation



Customized Sound Database

The unit is equipped with a Customized Sound Database that creates the most suitable sound for your car type.
You can fine tune the sound effects by inputting the size of your front speaker or tweeter, whether there is a Subwoofer, and the material of your seats.

1 Press and hold the **CSD** button for at least 2 seconds.

2 **Set your car type**
Rotate the **Audio Control** knob to select your car type, then press the **MODE** button.

3 **Setting the front speaker**
Rotate the **Audio Control** knob to select the front speaker type, then press the **MODE** button.

→ 10 cm ⟷ 13 cm ⟷ 16 cm ←

(DDDrive is an Alpine product)

4 **Set the separate tweeter**
Rotate the **Audio Control** knob to select whether the unit has a separate tweeter or not, then press the **MODE** button.

W/O TWEETER (without separate tweeter) ⟷ W/ TWEETER (with separate tweeter)

5 **Set the subwoofer**
Rotate the **Audio Control** knob to select whether the unit has a subwoofer or not, then press the **MODE** button.

W/O SUB-W (without Subwoofer) ⟷ W/ SUB-W (with Subwoofer)

6 **Set the material of your seats**
Rotate the **Audio Control** knob to select your seats' material, then press the **MODE** button.

CLOTH ⟷ LEATHER

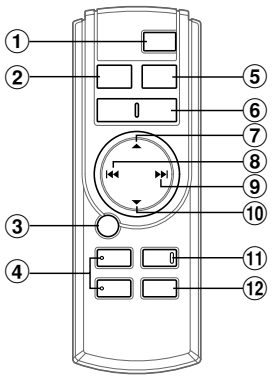
7 **Complete the settings**
After completing the settings, rotate the **Audio Control** knob to select CSD OK, then press the **MODE** button.

CSD OK? ⟷ CSD NO?

CSD OK: The unit automatically customizes the sound effect according to the above settings.
CSD NO: Returns to "Set your car type" in step 2.

NOTES

- *This function is inoperable when DEFEAT is ON (refer to page 9).*
- *While making a setting, press and hold the CSD button for at least 2 seconds to cancel the setting.*
- *Press the I◄◄ DN or ►►I UP button to go forward or backward to the next/preceding step.*



Controls on Remote Control

① **Power Button**
Press the button to turn the power on/off.

② **Source Button**
Press to select the audio source.

③ **►/II Button**
Press the button to switch between the Play and Pause modes for CD.

④ **ANGLE ▲▼ Buttons**
Press the button to adjust the angle of the movable display.

⑤ **Band/Programme Button**
Radio mode: BAND Button
Press the button and the band will change as shown below.

→ **FM1** → **FM2** → **FM3** → **MW** → **LW**

CD/Changer mode: To switch the disc mode.

⑥ **Volume Adjustment Buttons**
To increase the volume level:
Press the [∧] button
To decrease the volume level:
Press the [∨] button

⑦ **▲ Button**
Radio mode: Pressing the button will select, in ascending order, stations programmed into the radio's presets as shown below.

→ [1] → [2] ··· [6]

CD (MP3) mode: Press the Folder Select (UP) Button to select the folder.
CD Changer mode: DISC Select (UP) Button
Press the button to select a disc in ascending order.

⑧ **I◄◄ DN Button**
Radio mode: SEEK (DN) Button
CD mode: Press the button to go back to the beginning of the current track.

⑨ **►►I UP Button**
Radio mode: SEEK (UP) Button
CD mode: Press the button to advance to the beginning of the next track.

⑩ **▼ Button**
Radio mode: Pressing the button will select, in descending order, stations programmed into the radio's presets as shown below.

→ [6] → [5] ··· [1]

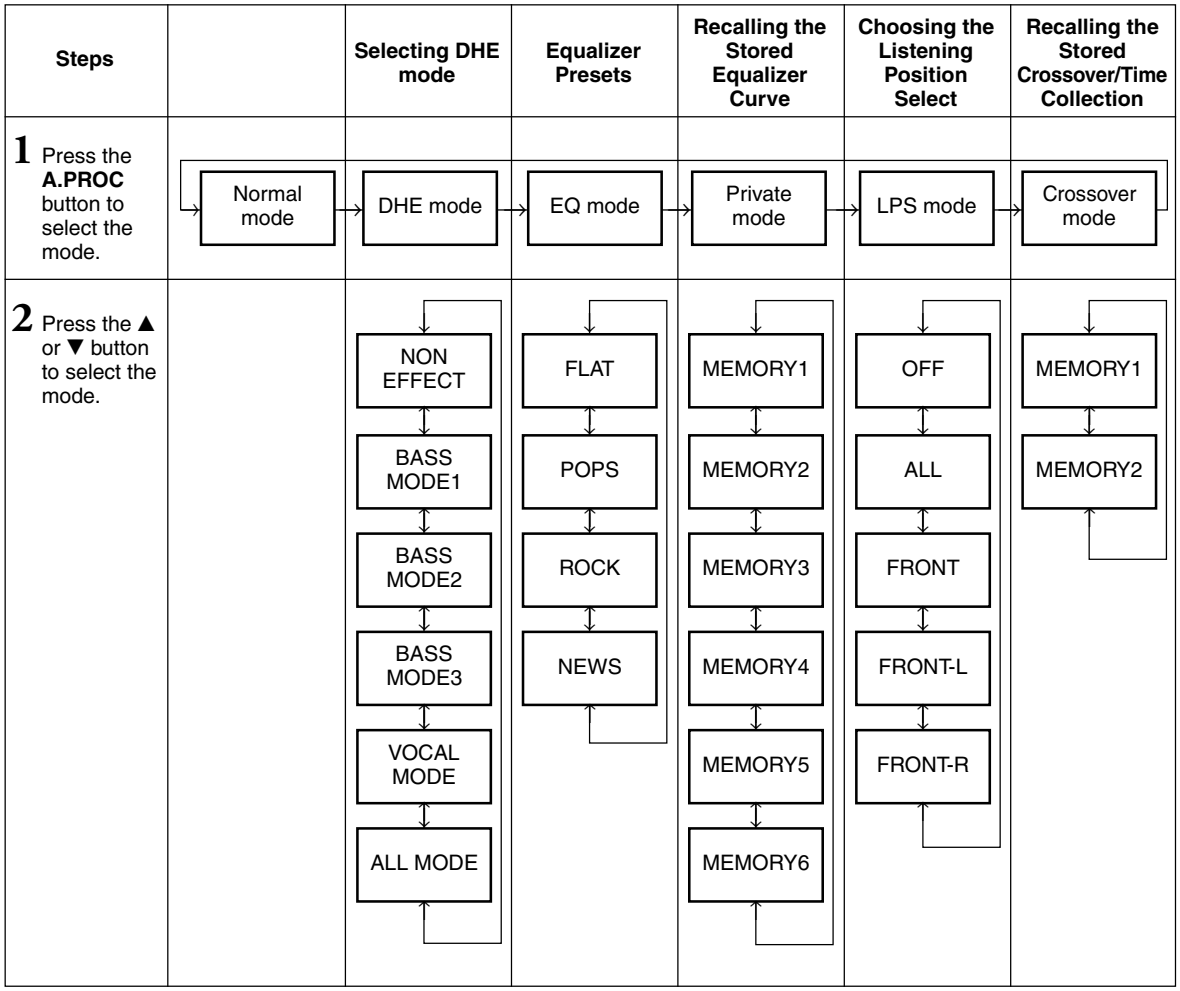
CD (MP3) mode: Press the Folder Select (DN) Button to select the folder.
CD Changer mode: DISC Select (DN) Button
Press the button to select a disc in descending order.

⑪ **Mute Button**
Press the button to lower the volume by 20 dB instantly. Press the button again to cancel.

⑫ **Audio Processor Button**
Each press the button to switch the audio processor mode.
For details, refer to page 36.

Remote Control Operation

Operating the Audio Processor



■ Adjusting/Storing the EQ curve

Adjusting

1 Perform the procedure above to select the desired equalizer characteristics.

2 Press the **ENTER** button to activate the Adjusting Mode.

3 Press the **I◀◀ DN** or **▶▶I UP** button to select the frequency to be adjusted.

4 Press the ▲ or ▼ button to adjust to your desired level.
To adjust other frequencies, repeat steps 3 to 4.

Storing

5 Press and hold the **ENTER** button for at least 2 seconds to flash the display.

6 Press the ▲ or ▼ button to select the preset number (1 through 6) that you want to store.

7 Press the **ENTER** button to store the setting. To store settings, repeat the procedure above.

8 Press the **A.PROC** button to return to normal mode.

■ Adjusting/Storing the CROSSOVER/TIME CORRECTION

Adjusting

1 Select the Crossover mode from the table above.

2 Press the **ENTER** button to activate the Adjusting mode.

3 Press the **BAND** button to select the channel (LPF/HPF) that you want to adjust.

4 Press the **I◄◄ DN** or **►►I UP** button to select the cut-off frequency.

5 Press the ▲ or ▼ button to select the Slope. To adjust more channels, repeat steps 3 to 5.

6 Press the **ENTER** button to activate the Adjusting level mode.

7 Press the **BAND** button to select the channel you want to adjust.

8 Press the ▲ or ▼ button to adjust the level. To adjust more channels, repeat steps 7 to 8.

9 Press the **ENTER** button to activate the Time Correction Adjusting mode.

10 Press the **BAND** button to select the channel that you want to adjust.

11 Press the ▲ or ▼ button to adjust the Time Correction. To adjust more channels, repeat steps 10 to 11.

Storing the settings

12 Press and hold the **ENTER** button for more than 2 seconds to flash the display.

13 Press the ▲ or ▼ button to select the preset number (1 to 2) that you want to store.

14 Press the **ENTER** button to store the adjustment. Store other adjustments, repeat the procedures above.

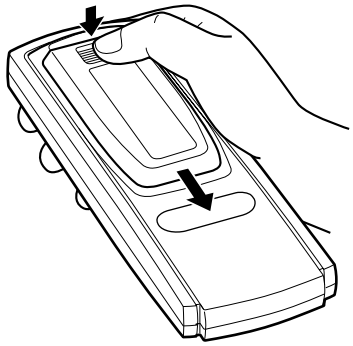
15 Press the **A.PROC** button to return to normal mode.

Remote Control Operation

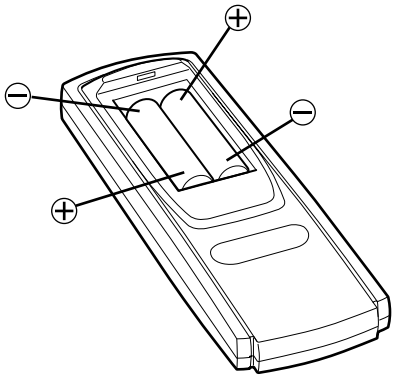
Battery Replacement

Applicable battery: Use two “AAA” sized dry batteries or equivalent.

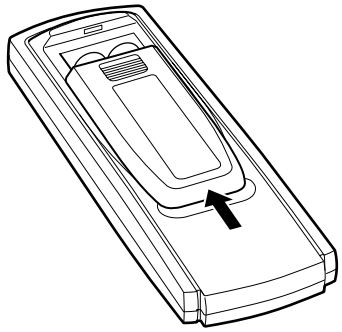
1 Opening the battery cover
Slide out the battery cover while firmly pressing the direction of arrow.



2 Replacing the battery
Put the batteries in the case observing the polarities as illustrated.



3 Closing the cover
Push the cover as illustrated until a click is heard.



In Case of Difficulty

If you encounter a problem, please review the items in the following checklist. This guide will help you isolate the problem if the unit is at fault. Otherwise, make sure the rest of your system is properly connected or consult your authorized Alpine dealer.

Basic

No function or display.

- Vehicle's ignition is off.
  - If connected following instructions, the unit will not operate with the vehicle's ignition off.
- Improper power lead connections.
  - Check power lead connections.
- Blown fuse.
  - Check the fuse on the battery lead of the unit; replace with the proper value if necessary.
- Internal micro-computer malfunctioned due to interference noise etc.
  - Press the RESET switch with a ballpoint pen or other pointed article.

Radio

Unable to receive stations.

- No antenna or open connection in cable.
  - Make sure the antenna is properly connected; replace the antenna or cable if necessary.

Unable to tune stations in the seek mode.

- You are in a weak signal area.
  - Make sure the tuner is in the DX mode.
- If the area you are in is a primary signal area, the antenna may not be grounded and connected properly.
  - Check your antenna connections; make sure the antenna is properly grounded at its mounting location.
- The antenna may not be the proper length.
  - Make sure the antenna is fully extended; if broken, replace the antenna with a new one.

Broadcast is noisy.

- The antenna is not the proper length.
  - Extend the antenna fully; replace it if it is broken.
- The antenna is poorly grounded.
  - Make sure the antenna is grounded properly at its mounting location.

CD

CD Player/Changer not functioning.

- Out of operating temperature range +50˚C (+120˚F) for CD.
  - Allow the vehicle's interior (or trunk) temperature to cool.

CD playback sound is wavering.

- Moisture condensation in the CD Module.
  - Allow enough time for the condensation to evaporate (about 1 hour).

CD insertion not possible.

- A CD is already in the CD player.
  - Eject the CD and remove it.
- The CD is being improperly inserted.
  - Make sure the CD is being inserted following instructions in the CD Player Operation section.

Unable to fast forward or backward the CD.

- The CD has been damaged.
  - Eject the CD and discard it; using a damaged CD in your unit can cause damage to the mechanism.

CD playback sound skips due to vibration.

- Improper mounting of the unit.
  - Securely re-mount the unit.
- Disc is very dirty.
  - Clean the disc.
- Disc has scratches.
  - Change the disc.
- The pick-up lens is dirty.
  - Do not use a commercial available lens cleaner disc. Consult your nearest ALPINE dealer.

CD playback sound skips without vibration.

- Dirty or scratched disc.
  - Clean the disc; damaged disc should be replaced.

Error displays (built-in CD player only)

- Mechanical error
  - Press the ⏏ button. After the error indication disappears, insert the disc again. If the above-mentioned solution does not solve the problem, consult your nearest ALPINE dealer.

MP3

MP3 is not played back.

- Writing error is occurred. The written format is not right.
  - Make sure the writing is not failed. Or refer to "About MP3" on page 26, then write in the format supported by this device.

Information

Indication for CD Player

HI TEMP

- Protective circuit is activated due to high temperature.
  - The indicator will disappear when the temperature returns to within operation range.

NO DISC

- No CD is inserted.
  - Insert a CD.
- Although a disc is inserted, “NO DISC” is displayed and the unit does not start to play or eject the disc.
  - Remove the disc by following these steps:
  1) Press the ⏏ button.
     The movable display will open.
  2) Press the ⏏ button again for at least 3 seconds while the movable display is open.

ERROR

- Mechanism error.
  1) Press the ⏏ button and eject the CD.
     If not ejecting, consult your Alpine dealer.
  2) When the error indication remains after ejecting, press the ⏏ button again.
     If the error indication still does not turn off after pressing the ⏏ button for a few times, consult your Alpine dealer.

NOTE

When the “ERROR” is displayed:
In case that the disc cannot be ejected by pressing the ⏏ button, press the RESET switch (refer to page 4) and press the ⏏ button again.
If not ejecting, consult your Alpine dealer.

Indication for CD Changer

HI TEMP

- Protective circuit is activated due to high temperature.
  - The indicator will disappear when the temperature returns to within operation range.

ERROR - 01

- Malfunction in the CD Changer.
  - Consult your Alpine dealer. Press the magazine eject button and pull out the magazine.
    Check the indication. Insert the magazine again.
    If the magazine cannot be pulled out, consult your Alpine dealer.
- Magazine ejection not possible.
  - Press the magazine eject button. If the magazine does not eject, consult your Alpine dealer.

ERROR - 02

- A disc is left inside the CD Changer.
  - Press the Eject button to activate the eject function. When the CD Changer finishes the eject function, insert an empty CD magazine into the CD Changer to receive the disc left inside the CD Changer.

NO MAGAZINE

- No magazine is loaded into the CD Changer.
  - Insert a magazine.

NO DISC

- No indicated disc.
  - Choose another disc.

Specifications

FM TUNER SECTION

Tuning Range	87.5 – 108.0 MHz
Mono Usable Sensitivity	0.7 µV
Alternate Channel Selectivity	90 dB
Signal-to-Noise Ratio	65 dB
Stereo Separation	35 dB
Capture Ratio	2.0 dB

MW TUNER SECTION

Tuning Range	531 – 1,602 kHz
Sensitivity (IEC Standard)	25.1 µV/28 dB

LW TUNER SECTION

Tuning Range	153 – 281 kHz
Sensitivity (IEC Standard)	31.6 µV/30 dB

CD SECTION

Frequency Response	5 – 20,000 Hz (±1 dB)
Wow & Flutter (% WRMS)	Below measurable limits
Total Harmonic Distortion	0.008% (at 1 kHz)
Dynamic Range	95 dB (at 1 kHz)
Signal-to-Noise Ratio	95 dB
Channel Separation	85 dB (at 1 kHz)

PICKUP

Wave length	655 nm
Laser power	CLASS II

REMOTE CONTROL

Battery Type	"AAA" sized dry battery
Battery Quantity	2
Dimensions (W × H × D)	42 mm (1-21/32") × 121 mm (4-25/32") × 23 mm (29/32")
Weight (without battery)	50 g (1.8 oz)

GENERAL

Power Requirement	14.4 V DC (11–16 V allowable)
Maximum Power Output	45 W × 4
Maximum Pre-Output Voltage	4 V/10k ohms
Weight	1.8 kg (3 lbs. 15 oz)

CHASSIS SIZE

Width	178 mm (7")
Height	50 mm (2")
Depth	155 mm (6-1/8")

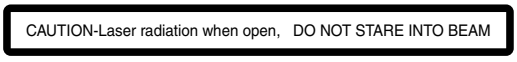
NOSEPIECE SIZE

Width	170 mm (6–11/16")
Height	46 mm (1-13/16")
Depth	24 mm (15/16")

Due to continuous product improvement, specifications and design are subject to change without notice.

CAUTION

(Bottom side of player)



(Bottom side of player)

Installation and Connections

Before installing or connecting the unit, please read the following and pages 2 and 3 of this manual thoroughly for proper use.

⚠ Warning

MAKE THE CORRECT CONNECTIONS.
Failure to make the proper connections may result in fire or product damage.

USE ONLY IN CARS WITH A 12 VOLT NEGATIVE GROUND.
(Check with your dealer if you are not sure.) Failure to do so may result in fire, etc.

BEFORE WIRING, DISCONNECT THE CABLE FROM THE NEGATIVE BATTERY TERMINAL.
Failure to do so may result in electric shock or injury due to electrical shorts.

DO NOT SPLICE INTO ELECTRICAL CABLES.
Never cut away cable insulation to supply power to other equipment. Doing so will exceed the current carrying capacity of the wire and result in fire or electric shock.

DO NOT DAMAGE PIPE OR WIRING WHEN DRILLING HOLES.
When drilling holes in the chassis for installation, take precautions so as not to contact, damage or obstruct pipes, fuel lines, tanks or electrical wiring. Failure to take such precautions may result in fire.

DO NOT USE BOLTS OR NUTS IN THE BRAKE OR STEERING SYSTEMS TO MAKE GROUND CONNECTIONS.
Bolts or nuts used for the brake or steering systems (or any other safety-related system), or tanks should NEVER be used for installations or ground connections. Using such parts could disable control of the vehicle and cause fire etc.

KEEP SMALL OBJECTS SUCH AS BATTERIES OUT OF THE REACH OF CHILDREN.
Swallowing them may result in serious injury.
If swallowed, consult a physician immediately.

DO NOT INSTALL IN LOCATIONS WHICH MIGHT HINDER VEHICLE OPERATION, SUCH AS THE STEERING WHEEL OR SHIFT LEVER.
Doing so may obstruct forward vision or hamper movement etc. and results in serious accident.

⚠ Caution

HAVE THE WIRING AND INSTALLATION DONE BY EXPERTS.
The wiring and installation of this unit requires special technical skill and experience. To ensure safety, always contact the dealer where you purchased this product to have the work done.

USE SPECIFIED ACCESSORY PARTS AND INSTALL THEM SECURELY.
Be sure to use only the specified accessory parts. Use of other than designated parts may damage this unit internally or may not securely install the unit in place. This may cause parts to become loose resulting in hazards or product failure.

ARRANGE THE WIRING SO IT IS NOT CRIMPED OR PINCHED BY A SHARP METAL EDGE.
Route the cables and wiring away from moving parts (like the seat rails) or sharp or pointed edges. This will prevent crimping and damage to the wiring. If wiring passes through a hole in metal, use a rubber grommet to prevent the wire's insulation from being cut by the metal edge of the hole.

DO NOT INSTALL IN LOCATIONS WITH HIGH MOISTURE OR DUST.
Avoid installing the unit in locations with high incidence of moisture or dust. Moisture or dust that penetrates into this unit may result in product failure.

Precautions

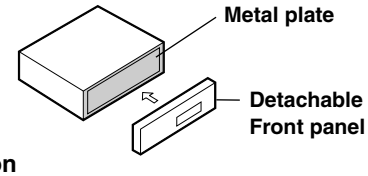
- Be sure to disconnect the cable from the (–) battery post before installing your CDA-7878R. This will reduce any chance of damage to the unit in case of a short-circuit.
- Be sure to connect the colour coded leads according to the diagram. Incorrect connections may cause the unit to malfunction or damage to the vehicle's electrical system.
- When making connections to the vehicle's electrical system, be aware of the factory installed components (e.g. on-board computer). Do not tap into these leads to provide power for this unit. When connecting the CDA-7878R to the fuse box, make sure the fuse for the intended circuit of the CDA-7878R has the appropriate amperage. Failure to do so may result in damage to the unit and/or the vehicle. When in doubt, consult your ALPINE dealer.
- The CDA-7878R uses female RCA-type jacks for connection to other units (e.g. amplifier) having RCA connectors. You may need an adaptor to connect other units. If so, please contact your authorized ALPINE dealer for assistance.
- Be sure to connect the speaker (–) leads to the speaker (–) terminal. Never connect left and right channel speaker cables to each other or to the vehicle body.

IMPORTANT

Please record the serial number of your unit in the space provided below and keep it as a permanent record. The serial number plate is located on the bottom of the unit.

SERIAL NUMBER: _____
INSTALLATION DATE: _____
INSTALLATION TECHNICIAN: _____
PLACE OF PURCHASE: _____

Installation

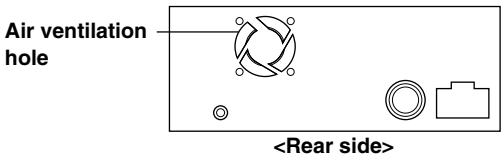


Caution

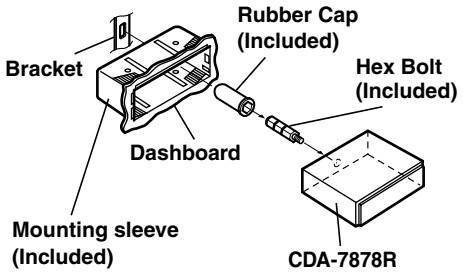
When you install this unit in your car, do not remove the Detachable Front Panel.
If the Detachable Front Panel is removed during installation, you might press too hard and warp the metal plate that holds it in place.

Caution

Do not block the unit's fan or heat sink, thus preventing air circulation. If blocked, heat will accumulate inside the unit and may cause a fire.

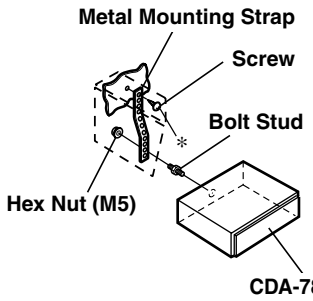


1



Slide mounting sleeve from main unit (see "Removal" on this page). Slide the mounting sleeve into the dashboard.

2

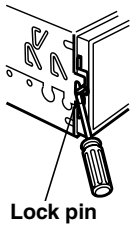


When your vehicle has the Bracket, mount the long hex bolt onto the rear panel of the CDA-7878R and put the Rubber Cap on the hex bolt. If your vehicle does not have the Mounting Support, reinforce the head unit with the metal mounting strap (not supplied). Connect all the leads of the CDA-7878R according to details described in the CONNECTION section.

NOTE

*For the screw *, provide a proper screw to the chassis installing location.*

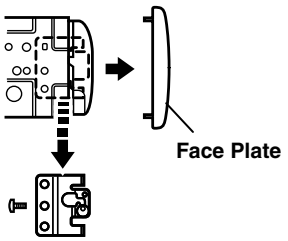
3 Slide the CDA-7878R into the dashboard. When the unit is in place, make sure the locking pins are fully seated in the down position. This can be done by pressing firmly in on the unit while pushing the locking pin down with a small screwdriver. This ensures that the unit is properly locked and will not accidentally come out from the dashboard. Install the Detachable Front Panel.

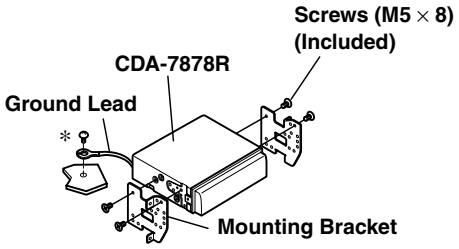


Removal

1 Remove the DETACHABLE FRONT PANEL.
2 Use a small screwdriver (or similar tool) to push the locking pins to the "up" position (see above drawing). As each pin is unlocked, gently pull out on the unit to make sure it does not re-lock before unlocking the second pin.
3 Pull the unit out, keeping it unlocked as you do so.

<JAPANESE CAR>



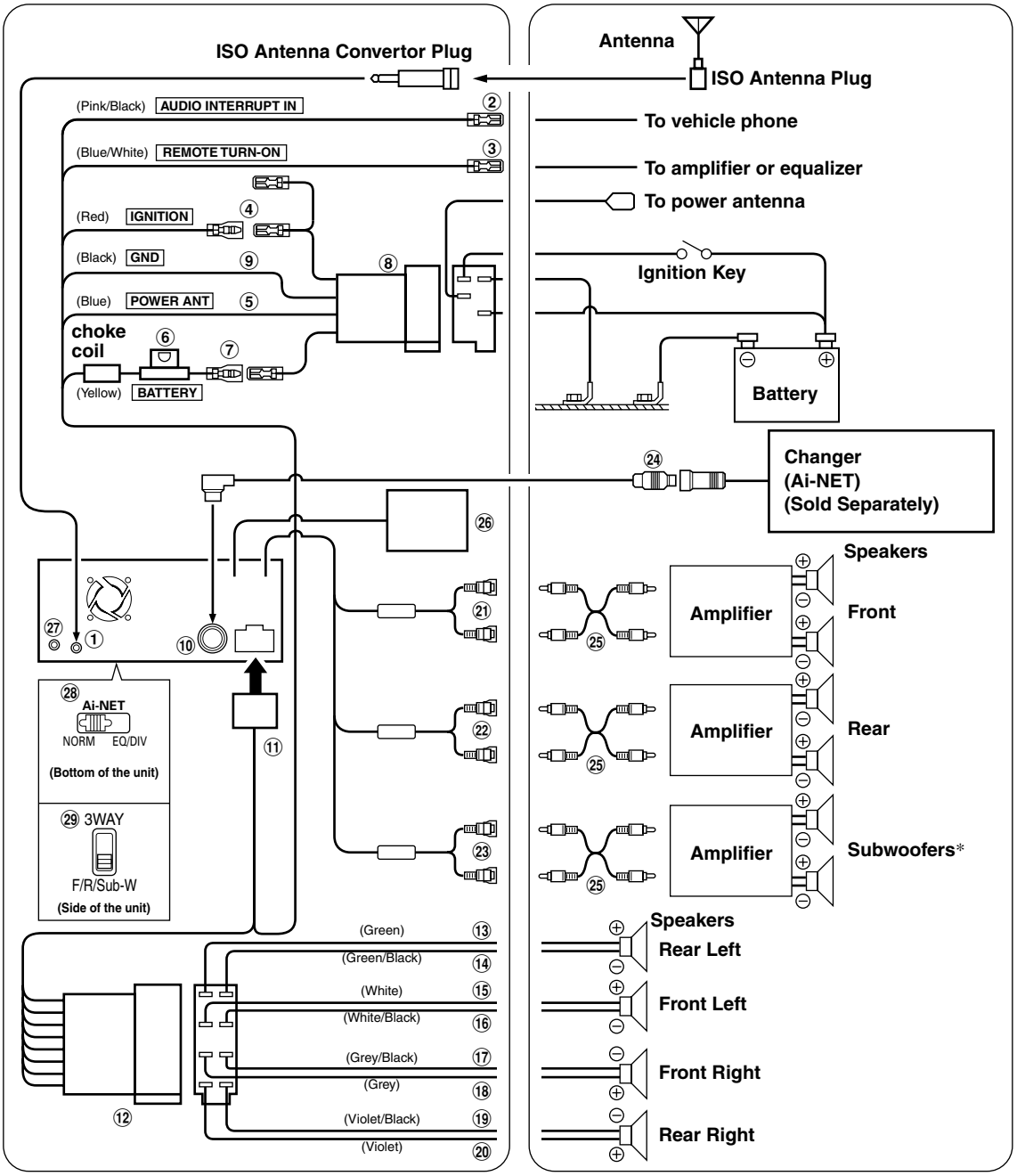


NOTE

Secure the ground lead of the unit to a clean metal spot using a screw (∗) already attached to the vehicle's chassis.

Installation and Connections

Connections



* *When Subwoofer is set to OFF: Output is from Rear speakers.*
When Subwoofer is set to ON: Output is from Subwoofer.

For details on how to set the Subwoofer to ON/OFF, see "Subwoofer On and Off" on page 6.

To prevent external noise from entering the audio system.

- Locate the unit and route the leads at least 10 cm away from the car harness.
- Keep the battery power leads as far away from other leads as possible.
- Connect the ground lead securely to a bare metal spot (remove any paint, dirt or grease if necessary) of the car chassis.
- If you add an optional noise suppressor, connect it as far away from the unit as possible. Your Alpine dealer carries various noise suppressors, contact them for further information.
- Your Alpine dealer knows best about noise prevention measures so consult your dealer for further information.

① Antenna Receptacle
Connect to the supplied ISO antenna convertor plug.

② Audio Interrupt In Lead (Pink/Black)
Connect this lead to the Audio Interface output of a cellular phone which provides ground shorting when a call is received.

③ Remote Turn-On Lead (Blue/White)
Connect this lead to the remote turn-on lead of your amplifier or signal processor.

④ Switched Power Lead (Ignition) (Red)
Connect this lead to an open terminal on the vehicle's fuse box or another unused power source which provides (+) 12V only when the ignition is turned on or in the accessory position.

⑤ Power Antenna Lead (Blue)
Connect this lead to the +B terminal of your power antenna, if applicable.

NOTE

This lead should be used only for controlling the vehicle's power antenna. Do not use this lead to turn on an amplifier or a signal processor, etc.

⑥ Fuse Holder (15A)

⑦ Battery Lead (Yellow)
Connect this lead to the positive (+) post of the vehicle's battery.

⑧ ISO Power Supply Connector

⑨ Ground Lead (Black)
Connect this lead to a good chassis ground on the vehicle. Make sure the connection is made to bare metal and is securely fastened using the sheet metal screw provided.

⑩ Ai-NET Connector
Connect this to the output or input connector of other product (CD changer, Equalizer, etc.) equipped with Ai-NET.

⑪ Power Supply Connector

⑫ ISO Connector (Speaker Output)

⑬ Left Rear (+) Speaker Output Lead (Green)

⑭ Left Rear (–) Speaker Output Lead (Green/Black)

⑮ Left Front (+) Speaker Output Lead (White)

⑯ Left Front (–) Speaker Output Lead (White/Black)

⑰ Right Front (–) Speaker Output Lead (Grey/Black)

⑱ Right Front (+) Speaker Output Lead (Grey)

⑲ Right Rear (–) Speaker Output Lead (Violet/Black)

⑳ Right Rear (+) Speaker Output Lead (Violet)

㉑ Front Output RCA Connectors
RED is right and WHITE is left.

㉒ Rear Output RCA Connectors
RED is right and WHITE is left.

㉓ Subwoofer Output RCA Connectors
RED is right and WHITE is left.

㉔ Ai-NET Cable (Included with CD Changer)

㉕ RCA Extension cable (Sold Separately)

㉖ DC/DC Converter

NOTES

- *Do not install the converter at a location subjected to water such as under the floor mat or air conditioner. This may cause a malfunction.*
- *Do not bundle the DC/DC converter cable with other audio cables. Doing so may induce noise into your system.*
- *Keep the DC/DC converter away from the Antenna cables and the rear side of the unit, otherwise noise may be generated when receiving radio broadcast.*

㉗ Remote Control Interface Connector
To remote control interface box.

㉘ System Switch
When connecting a processor using Ai-NET, place this switch in the EQ/DIV position. When no device is connected, leave the switch in the NORM position.

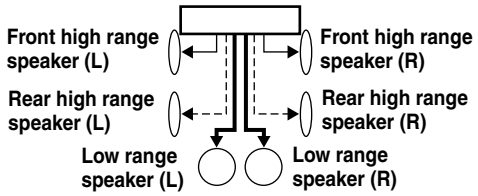
NOTE

Be sure to turn the power off to the unit before changing the switch position.

㉙ Setting the 3WAY/2 WAY switch
Set the 3way/2way Switch according to your audio system.

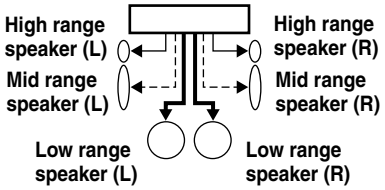
The system whose frequency range is divided between the high frequency range and the low frequency range.

The position of switching the switch: F/R/Sub-W


Front high range speaker (L)
Front high range speaker (R)
Rear high range speaker (L)
Rear high range speaker (R)
Low range speaker (L)
Low range speaker (R)

The system whose frequency range is divided among the high frequency range, mid frequency range, and the low frequency range.

The position of switching the switch: 3WAY



Output of this unit :
Front output **Rear output** **SUB-W output**

NOTES

- *Use the SUB-W output cord to connect the unit to the Low Range speaker.*
- *You can use the built-in amplifier to output the Front output/Rear output.*
- *You cannot adjust the FADER when setting to 3 WAY.*